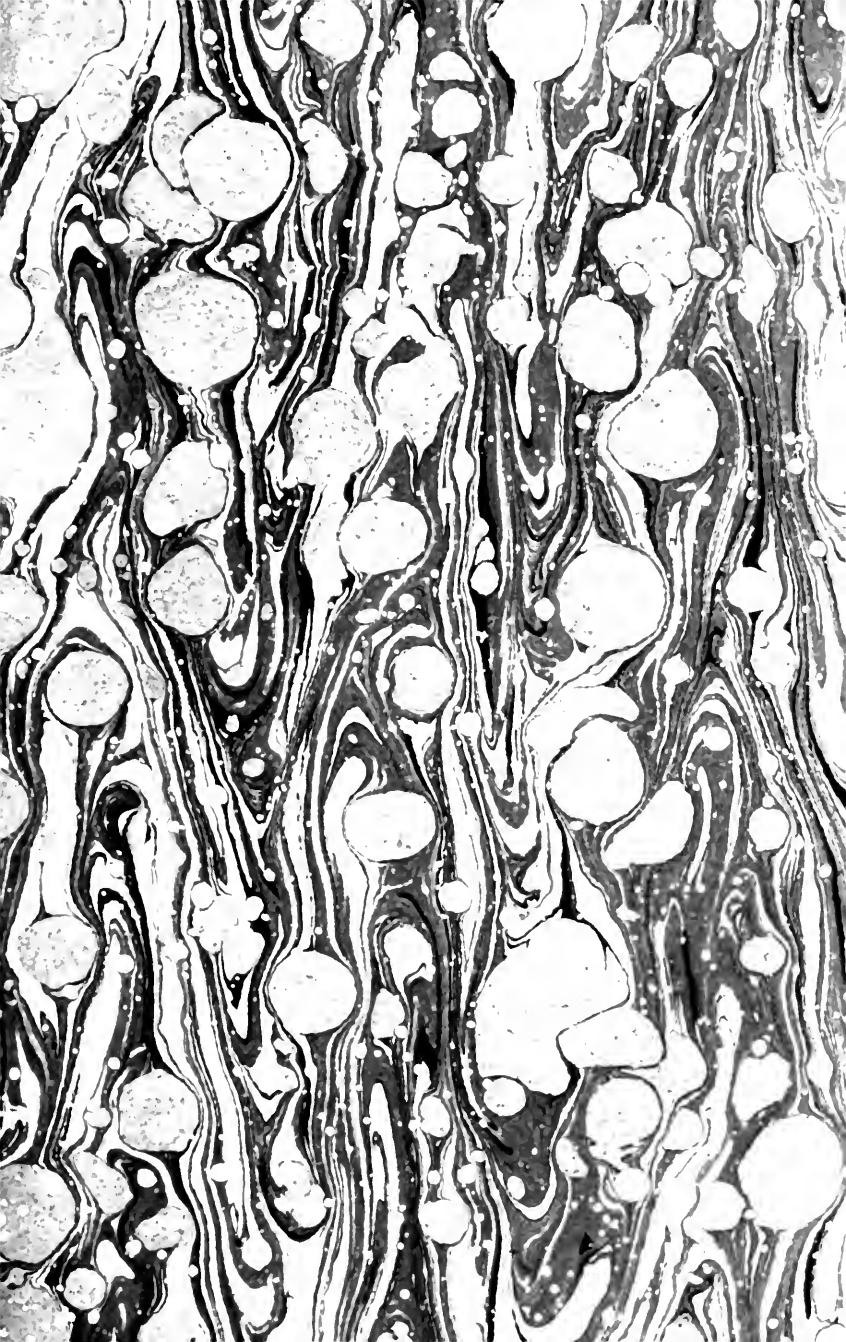

AN INTRODUCTION

TO THE

CRITICAL PHILOSOPHY.

INTENDED FOR THE USE OF STUDENTS.

BY

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Works by the same Author.

An Examination of M. Cousin's Criticism of Locke.

An Essay on the Christian Miracles.

Space and Vision: An Attempt to deduce all our knowledge of Extension from the Sense of Sight.

Dublin: Printed at the University Press, by M. H. Gill.

PREFACE.

THE following work is one of a number projected by the author at a time when he was chiefly occupied with the study of the various branches of Metaphysics. Most of it has been written for some years, and would have seen the light at a much earlier period had the Board of Trinity College desired it. On finding myself compelled (somewhat unwillingly) to abandon Metaphysics for a very different pursuit, I had to choose between destruction and publication; and believing that the book might prove useful to students in Philosophy elsewhere, if not here, I resolved to adopt the latter course, though probably at a pecuniary loss. I must ask the public to judge it on its own merits without being influenced by the reception it is certain to meet with in Trinity College. For two reasons it will meet with no favour there: first, because the principles of "Natural

Natural Realism, and Common Common Sense," have been formally adopted by the Board as the Dublin Metaphysics of the future; secondly, and chiefly, because the author is not a Fellow nor a Member of the Official Staff, from whose writings all the *Irish* works in the Curriculum are selected. I must therefore be satisfied with occupying the same position with Archer Butler, Webb, Fitzgerald, Maguire, and Graham, without aspiring to the higher honours accorded to Murray, Walker, Abbott, and Mahaffy.[1] It is true, indeed, that more than forty years ago Sir William Hamilton cited Murray's Logic as a proof of the deplorably low condition of that science in the University of Dublin (Discussions, p. 123), while Walker's knowledge of Philosophy may be judged of from the following extract (penned during the present century): "The word representation implies that there is a resemblance between our ideas and the things which excite them—that they

[1] The last change in the Honour Course in Metaphysics has been to exclude Archer Butler's Lectures, and Webb's Intellectualism of Locke, replacing them by Messrs. Abbott and Mahaffy's works on Kant. The same revision excluded Archbishop Whately's Logic while retaining Murray and Walker.

are a kind of pictures in the mind or images of the things. This was a received principle in the Platonic and other schools, and was taken up without sufficient examination. Its falsehood was partly perceived by Mr. Locke, and more fully detected by our most ingenious countryman, Berkeley." But then Murray was a Provost, and Walker was a Fellow; and after all they were quite as well qualified to write on the subject as many of the Honour Examiners (selected for similar reasons) have been to examine. I, myself, recollect hearing an Examiner in Mansel's Prolegomena Logica inform the class that he had "never heard of negative thinking;" and the student who *had*, did not I think get credit for his answer. The veracious Calendar (also the work of a Fellow), informs us that a considerable portion of the Honour Lectures in Moral Philosophy are still delivered by "the Science sublecturer of the Senior Sophister Class" (p. 73). I should be sorry to imply that Messrs. Mahaffy and Abbott belong to the same class of writers with Messrs. Murray and Walker, or that many very excellent volumes have not been published by the Fellows of Trinity College. I only desire to call

the attention of the public to the fact that the acceptance of the work of a Fellow as a portion of the University Curriculum is a matter of course—and the price of the book is often fixed apparently with a view to its compulsory sale—while the non-acceptance of the work of an outsider is equally certain; and I do so because I believe that more than one work of merit, from the pen of a distinguished Graduate, has failed to receive the attention it deserves from the public, in consequence of the fact that no notice was taken of it or its author at home. I may add, that it would be a great mistake to reject a Trinity College applicant for any Professorial chair elsewhere on the ground that he had applied unsuccessfully for a chair of small value in this University which was bestowed on another candidate of little note; for the rule of preferring a Fellow or ex-Fellow (whatever his qualifications may be) to any other person appears to be absolutely inflexible. I therefore hope that my critics will study the present work on its own merits; and if their verdict on the merits is unfavourable I shall have nothing more to say.

As the following Treatise is designed to be

rather a popularisation than a Philosophical exposition of the *Critick*, I do not think it necessary to prefix any general view of its contents; I would only request the reader to pay particular attention to the Kantian distinction between Analytical and Synthetical Judgments, and between Sensibility and Understanding; and also to bear steadily in mind that Space and Time belong to the Senses and not to the Intellect. It is this last point which constitutes the peculiarity of Kant; for the *a priori* origin, and even the subjective character of Space and Time had been maintained by many Philosophers before him, and are not in any respect distinctive of the Critical Philosophy. In addition to this an acquaintance with the fundamental principles of the Aristotelian Logic is absolutely necessary to enable the reader to follow the *Critick*. Kant believes that this Logic affords us a complete analysis of the operations of the Understanding, and that it is these very operations, taken in conjunction with the confused manifold presented by the senses, which constitute all Knowledge and all Experience. "Common Logic," says our author, "presents me with a complete and systematic catalogue of all the simple operations

of Reason ; and it is my task to answer the question, how far (this) Reason can go without the material presented, and the aid furnished by experience." (*Critick*, xx.) The Kantian meaning of the term Experience—empirical *cognition*, not mere sensation—must likewise never be lost sight of. Kant never dreamt of maintaining that his Categories were essential to *sensation*. "Mere intuition," says he, "does not in any respect stand in need of the functions of thought." (*Critick*, 76.)

TRINITY COLLEGE, DUBLIN,
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AN INTRODUCTION

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1. The Philosophy of Kant has been so much studied in this country and this University of late, that any attempt to render it more intelligible to ordinary readers needs no apology. It strikes me that this might be more effectually accomplished by directing the student's attention to a few of its leading positions, with some of the principal objections which appear to me to lie against them, than by an extended Commentary on the System. At all events, Mr. Mahaffy has pre-occupied the latter field, and I shall, therefore, confine myself to the former; but I hope the following remarks may prove of use to those who are about to study Mr. Mahaffy's Commentary, or Mr. Meiklejohn's Translation of the Critick—not as a substitute, but as an introduction.

2. Kant's historical position should not be lost sight of. He was the successor of the German Metaphysicians, Leibnitz and Wolff, with whom Meta-

physics was another term for Ontology—the Science of Real Being, of Things in themselves, of Noumena. These philosophers had aimed at demonstrating the existence and attributes of God and the immortality of the soul, and at determining the properties of the world and the material substances in it entirely *a priori*, that is independent of all experience. This I may add is the ordinary meaning of the word Metaphysics in Kant; but as he arrives at the conclusion that in this sense the science is impossible, he proposes from henceforth to employ the term in a new signification, namely the science which determines the nature and limits of pure or *a priori* knowledge. After Leibnitz and Wolff had come Hume, who endeavoured to overthrow the certainty of all human knowledge, but whose attacks were mainly directed against the knowledge of the supersensible beings with which the German Metaphysicians had dealt. Kant, who would seem to have been a Leibnitian or rather a Wolffian until the writings of the great sceptic fell into his hands, was struck with the force of his reasoning, and resolved to institute a thorough investigation of the possibility and limits of *a priori* knowledge. He did this in the interests of Metaphysics. He had to deal with Mathematics and Physics incidentally in the course of his inquiry, for he came to the conclusion that all our Mathematical knowledge and a portion of our Physical knowledege was *a priori*, or

independent of experience: but then he saw that these sciences were sufficiently secure in themselves without seeking for any certificate from philosophy. Metaphysics on the other hand needed a deduction "for its own sake" (Prolegomena, pp. 114–5, Mahaffy's Translation). It was from this point of view that he called his great work the Critick of Pure Reason; for Pure Reason (as distinct from the Sensibility and the Understanding) is the faculty which aims at knowing the Supersensible—the Unconditioned—and seeks to solve all the problems of Ontology or Metaphysics Proper. Kant guards against any mistake on this point at the very outset. In the Preface to the First Edition (which unfortunately is hardly intelligible to the English student until he has first mastered the Transcendental Dialectic), the object of the work is briefly explained; and if we go on to p. 4 of the Introduction (Meiklejohn's Translation), we learn from the opening passage of Section 3 that the book is intended as a Critick of the Science of Being, not of the Science of Phænomena. In this passage the subsequent distinction of Reason and Understanding is anticipated, and the title of the book, which has been so often misapprehended, is explained. I give the passage, slightly abbreviated, in a foot note.[1]

[1] "Certain of our cognitions rise completely above the sphere of all possible experience, and by means of conceptions

But Kant's German predecessors had not merely been Metaphysicians but Logicians, and the Critical Philosopher takes the results of that science for granted. By Logic I mean Aristotelian Logic, which Kant accepts as a true and complete (or rather nearly complete) analysis of the forms and products of Thought. I here of course take Thought in the strict sense in which it is used by Hamilton and Mansel, in which it is opposed to intuition and sensation and is equivalent to the Discursive or Comparative faculty, whose products are Concepts (Locke's complex ideas), Judgments, and Syllogisms. Its leading law is the law of Contradiction, and the chief characteristic of all its operations is that they can lead us to no new truth. Logic can conduct us to no judgment that is not implied in the very nature of the concepts (subject and predicate) and no conclusion that is not involved in the very nature of the judgments (the premisses) employed.

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to which there exists in the whole extent of experience no corresponding object, seem to extend the range of our judgments beyond its bounds: and just in this *transcendental or supersensible sphere* lie the investigations of *Reason*, which on account of their importance we consider far preferable to all that the *Understanding* can achieve within the *sphere of sensuous phenomena*. These unavoidable problems of mere *Pure Reason* are God, Freedom, and Immortality. The science which has for its especial object the solution of these problems is named *Metaphysics*." Meiklejohn's Kant, pp. 4, 5.

Hence, whenever by a process of thought or reasoning we appear to arrive at new truths we have only deceived ourselves. Either the conclusion is not new, or we have reached it by some fallacious means. If Metaphysics or Ontology is to lead us to important truths, it must either have such truths to start from, or it must not profess to reach them by mere thought and reasoning. But as we are here deprived of all aid from experience, thought and reasoning seem to be the only processes at our disposal for attaining the desired results. From this point of view Kant was led to inquire what were the primary truths or fundamental premisses from which we are to start in our Metaphysical systems? What original premisses must we assume in order to establish the three great objects of Metaphysics—the Existence of God, the Freedom of the Will, and the Immortality of the Soul? And how are we justified in assuming the truth of these premisses?

3. Here we reach Kant's famous distinction of analytical and synthetical judgments. The meaning of every concept resides in the attribute or collection of attributes connoted or signified by its name. Man means anything that possesses life, corporeal substance, reason, and a certain external form. Mortal means anything that will die. When I say that Every man is mortal, I mean that wherever the four attributes signified (or connoted) by the word man are found, the fifth attribute signified by

the word Mortality, will be found along with them. When I say Every animal with horns on the skull ruminates, I mean that wherever we find the attribute horns on the skull we shall find the attribute rumination along with it. These propositions therefore assert a co-existence of attributes. But if I say Every man is an animal, I assert no co-existence of attributes. I merely say that wherever I find life, corporeal substance, reason, and a certain external form, I find life and corporeal substance. The truth of this proposition is implied in (as Kant would say) the concept Man and the concept Animal. It would be equally true though there was no man or no animal in existence. I have merely to analyse (or resolve into parts) the concept Man to find the concept Animal in it; and of course it would be idle to refer to experience to ascertain the truth of a proposition of this kind. If A man is an animal was a truth dependent on experience, so would A man is a two-legged animal, A man is a rational two-legged animal, and, finally, A man is a man. Such truths then are analytical, and can be known independently of experience as soon as we have got the requisite concepts. But they are of no assistance to us in arriving at the fundamental principles of any science. Metaphysics would be useless if it could not teach us the properties of existing objects; but these analytical judgments do not even teach us the existence of objects. A round-square is

round, is an unquestionable truth, and A centaur has a horse's tail is another. But the round-square and the centaur do not exist; and as an analytical judgment cannot prove their existence, so neither can it prove the existence of God, Freedom, or Immortality. We require, therefore, for a science of Metaphysics judgments of another kind—judgments in which the comprehension of the predicate is not a part of the comprehension of the subject—judgments which assert that certain attributes co-exist with certain other attributes—in a word, synthetical judgments. This distinction between judgments or propositions which assert that where certain attributes are found *these* attributes (or some of them) are found, and that where certain attributes are found certain *other* attributes are found, is sufficiently obvious. It falls in with Locke's distinction between propositions which are purely verbal or trifling and those which are real and instructive; but Kant would not have admitted that all analytical judgments are purely verbal and trifling. The reader should bear in mind, however, that words often change their meaning, and in consequence of this change the same *form of words* which at one time (or to one person) expressed a synthetical judgment, may at another time (or to another person) express an analytical one. Kant, for instance, gives as an example of the former class, All bodies are heavy, and of the latter, All bodies are extended. But many persons now include the attri-

bute weight in the concept to which they apply the term Body, and to these persons the proposition All bodies are heavy is analytical; while again, if a man's idea of body is merely Something that exists and affects our senses, to him it is a synthetical proposition that All bodies are extended. The reader must therefore distinguish between the judgment or assertion itself and the language in which it is conveyed, or else he will be in danger of pepetual confusion on this vital point.

4. To proceed. The fundamental principles of Metaphysics must be synthetical judgments, for analytical judgments can lead us to no new truths. But the subject-matter of Metaphysics lies entirely beyond the field of experience, and, consequently, the synthetical judgments which we require for its basis cannot be derived from experience. If, therefore, a Science of Metaphysics be possible, we must have synthetical judgments which are not dependent on experience, or synthetical judgments *a priori*. And here we arrive at the problem of the Critick—namely, *How are synthetical a priori judgments possible?* In solving this problem we can plainly expect no aid from experience, nor yet from the discursive (reasoning) faculty, since Logic, which expounds the operations of this latter faculty, leads only to analytical judgments.

Hume had said that sythetical *a priori* judgments were impossible; but Kant soon began to doubt the

truth of this position. He saw, for example, that A straight line is the shortest line between two points is a synthetical judgment: for "straight" means uniform in direction, and describes a quality of the line, while its shortness relates to quantity and is quite distinct from the quality of straightness. So, too, it is no part of the idea of a right line that two of them could not enclose a space. These propositions then are synthetical; but Kant could not persuade himself that they were mere inferences from experience. They posessed an universality and a necessity which was entirely absent in the great majority of propositions derived from experience. Experience could only teach what was, but these propositions taught us what must be. They were therefore independent of experience, or *a priori*.[1] Consequently synthetical *a priori* propositions exist; and, therefore, some kinds of them at least are possible. Nor are they limited to the domain of Mathematics. Everything that begins to exist has a cause, is likewise an universal and necessary synthetical proposition; indeed universality and necessity is to be found in ideas (using this word in the vulgar, not the Kantian, sense) as well as in judgments. I cannot imagine a limit to space, nor can I annihilate it in

[1] In a short essay of this kind it would be impossible to defend Kant's criteria of universality and necessity. I therefore merely say that these were the tests which he adopted.

imagination. It is therefore universal and necessary. My idea of a cause is not merely that which something else follows, but that which something else *necessarily* follows. The *idea* therefore involves necessity, even if it were impossible to point out a single necessary connexion of two facts in the world. Hence space and causation are *a priori* ideas.

Synthetical *a priori* judgments then are possible, for they exist; but *how* are they possible? It is no part of the idea of a right line that it is the shortest distance between two points. To connect these two ideas therefore, I must go outside of them and seek for some third term which brings them into mutual relation. But this third term cannot be experience, since the connexion is represented as universal and necessary. Here then the problem, How are synthetical *a priori* judgments possible, takes a more definite shape. It becomes, What is the third term which connects the subject with the predicate in such judgments, and how can it connect them? The Critick of Pure Reason undertakes to solve this problem. But there are three classes of these judgments: the Mathematical, the Physical, and the Metaphysical. It is with respect to the third only that Kant aims at arriving at a new and decisive result; but the investigation of the two former may throw great light upon the third. Hence, Kant not merely deals with the question, How is Pure Metaphysics possible, but also with the questions, How is Pure Mathematics

possible, and how is Pure Physics possible. And the solution of the three questions will be found in the three divisions of the work. Pure Mathematics is treated of in the Aesthetic; Pure Physics in the Analytic; Pure Metaphysics in the Dialectic. The last alone answers the original design; but its problem was found to be a part of a wider one, and Kant could not find a satisfactory solution for this part without solving the whole.

5. Such is the object of the Critick from the viewpoint of Kant. But the student is more likely to approach it from the Psychological than the Metaphysical side, reaching it through Locke, Stewart, and Hamilton, rather than Leibnitz, Wolff, and Hume. He will rather seek to inquire, What faculties did Kant acknowledge? What functions did he ascribe to each of them? Is the Kantian Psychology correct? and are the Metaphysical or Ontological results at which he arrives the legitimate results of his Psychology? This is the point of view from which I propose to sketch the leading principles of the Critick of Pure Reason, which indeed can be done without departing from Kant's order of exposition.

6. Kant accepts the generally received division of the cognitive (or knowing) faculties into the Senses and the Intellect—the sensibility and the understanding. The former he divides into External and Internal Sense, therein following Locke, who uses Internal Sensation or Internal Sense as the

synonym of Reflection. The products of this Sensibility Kant calls intuitions (which thus correspond to Locke's Simple Ideas), but he sometimes uses the word Intuition in a more special sense in which it is contrasted with Sensation. This latter distinction corresponds to Reid's distinction between Perception and Sensation, both of which are by Kant, as by Locke, referred to the Sensibility. Understanding is divided on a different principle, borrowed rather from the Logicians than from preceding Psychologists. Its three subdivisions are Understanding (proper), Judgment, and Reason, corresponding to the three recognised products, Simple-apprehensions or Concepts (answering to Locke's complex ideas), Judgments, and Syllogisms. It will thus be observed that Kant uses the word Understanding both in a wider and a narrower sense, as he himself notices (Critick, p. 103). The terms Judgment and Reason are not subject to similar ambiguities. Imagination Kant does not regard as a distinct faculty. So far as it is reproductive it is merely another form of the Sensibility: so far as it is productive it is another form of the Understanding.

So far there is nothing very novel in the Kantian Psychology. But what is the characteristic by which the Sensibility and the Understanding are distinguished? Locke had stated that "in bare, naked perception (the function of sensibility) the mind is *for the most part* only *passive*;" while

"Thinking" (the function of the Understanding) "*in propriety of the English tongue* signifies that sort of operation about its ideas wherein the mind is *active*" (Essay II. ix, 1).[1] But such a distinction as this could not be accepted by so accurate a thinker as Kant. He saw clearly that knowledge could only result from a combination of the two elements; and therefore the fact that the mind in knowing was never purely active or purely passive afforded no reason for ascribing action to the sensibility or passivity to the understanding. All knowledge containing an active element and a passive element, the only scientific distinction of two faculties which could be admitted was to make the one purely passive—receptive; and the other purely active—spontaneous. Sensibility might exist without understanding, but this thoughtless intuition could afford us no knowledge (Critick, 75–6). Understanding might exist as a dormant faculty without sensibility, but unless it had the data either of our present sensibility or of some other kind of sensibility, to operate upon, it could not act at all (Critick, 46, 89). To give the distinction in Kant's own words, "We apply the term *sensibility* to the *receptivity* of the mind in so far as it is in some way *affected*; and on the other hand we call the faculty of *spontaneously producing*

[1] Locke uses stronger language in other passages.

representations, or the spontaneity of cognition, *understanding*. Our nature is so constituted that *intuition* with us never can be other than *sensuous*, *that is, it contains only the mode in which we are affected by objects*. Neither of these faculties has a preference over the other. Thoughts without content are void: intuitions without concepts blind. Hence it is as necessary for the mind to make its concepts sensuous (that is, to join to them the object in intuition) as to make its intuitions intelligible (that is, to bring them under concepts). Neither of these faculties can exchange its proper function. Understanding cannot intuite, and the sensuous faculty cannot think. *In no other way than from the united operation of both can knowledge arise; but no one ought on this account to overlook the difference of the elements contributed by each.* We have rather great reason carefully to distinguish them" (Critick, 45–6). Accordingly, he defines Sensibility as "the capacity for receiving representations *through the mode in which we are affected by objects*," and Sensation as "the *effect* of an object upon the faculty of representation *in so far as we are affected by the said object*" (Critick, 21). This strict limitation of sense to pure passivity involves him in an apparent paradox with regard to the internal sense, viz., that the mind stands in a passive relation to itself. Kant maintains that this paradox is strictly true in the two passages in which he deals with it (Critick, 41, 93–6).

In the latter, which is the fullest, he says, "Thus (under the name of the transcendental synthesis of imagination) *the understanding* exercises an activity on the *passive* subject whose faculty it is; and we are right in saying that *the internal sense* is *affected* thereby" (Critick, 94); and again, "I do not see why so much difficulty should be found in admitting that our internal sense is affected by ourselves. Every act of attention exemplifies it" (Critick, 96, *note*). Understanding, then, according to Kant, is only active; sensibility is only passive.[1] Those who imagine that understanding may be passive and sensibility active, or who fancy that synthetical judgments may become analytical, or analytical

[1] There is no point on which Kant has been so persistently misrepresented as this, and I fear Mr. Mahaffy has done something to countenance the error. (Critical Philosophy, vol. i. part i. p. 70). The context sufficiently shows his mistake as to the meaning of the passage quoted, in which he seems to take "the faculty of self-consciousness" as equivalent to the *internal sense*, whereas it is the primitive form of the *understanding* (Critick, 82). In the sentences preceding and following that quoted by Mr. Mahaffy (Critick, 41), Kant explicitly denies spontaneity to the internal sense, and says that by means of it we intuite only "the manner in which the mind is internally *affected*." Even its form—Time—is only "the mode in which the mind is affected by its own activity;" which activity is clearly referrible to the *understanding*. See, too, (Calderwood's) Metaphysic of Ethics, p. 59, and Kant's Theory of Ethics, by Abbott, pp. 102-3, in which the passivity of sense is clearly asserted.

judgments synthetical, may as well abandon the study of Kant. Indeed, the distinction is indicated in the very first paragraph of the Critick, though the words Sensibility and Understanding have not yet been introduced.

7. With this ground of distinction, however, Kant combines another. The passive element in cognition consists, according to him, of a confused indefinite multiplicity, and the active element consists in the combination, uniting or connecting, of this multiplicity. The current theory of sensitive *minima* will here illustrate the position of Kant. This page contains hundreds or thousands of *minima visibilia*, but of each of these the reader has no distinct idea. If I asked him to point out the precise position of one with its limits on all sides, he would confess himself entirely at a loss. Nay, he would probably admit that it could be divided into sensitive *minima* in different ways—that in the case of two adjacent *minima* for instance, a new *minimum* might be made up by joining the right half of one to the left half of the other, or the upper half of one to the lower half of the other. Thus numerous as we suppose these elements to be, and faint as is our consciousness of each of them, we regard them as made up even of more numerous elements, of which our consciousness (if consciousness it can be called) is still more feeble. Yet when a large number of these elements are put together,

as is the case with a page, or a line, or a word, or even a letter, I have a distinct object before me, of which my consciousness is clear and accurate. Thus all sensible objects may be regarded as made up of an infinite (or almost infinite) number of infinitely (or almost infinitely) small elements. Such an object is, in fact, like an integral of $dx \cdot dy$ between given limits. Now Kant observed that we do not *make* these little elements. They are there independently of us: they are *given* us. They are, therefore, the contribution of the sensibility. But it requires an *act* of the mind to combine them. Even when the particular combination is already traced out for us by nature or art, it requires an active effort to take it in completely and to the exclusion of surrounding objects—an effort which is more easily observed when the object is large or complicated in form. This fact suggested to Kant the theory that these little elements as passively given by sense are without *any* order, combination, or unity, and that *all* combination and unity is introduced into them by the act of the understanding. "The *conjunction* of a manifold in intuition," says he, "can never be given us by the senses, for it is a spontaneous *act* of the faculty of representation. All conjunction—whether conscious or unconscious, whether of the manifold of intuition or of several concepts—is an act of the *understanding*. To this act we shall give the general appellation of

synthesis, thereby to indicate that we cannot represent anything as conjoined in the object without having previously conjoined it ourselves" (Critick, 80). Thus, even unity *of intuition* is only possible when we call the understanding to the assistance of the sensibility (Critick, 88). I cannot regard this letter or this word as *one* by mere sense. Sense gives me nothing but the manifold elements of which the letter or word consists, and does not combine them. When, therefore, Kant ascribes intuition to the sensibility, this must not be understood to imply that sense alone can give us *this* intuition as distinguished from *that*. It gives all the manifold in a confused mass which must be reduced to order and unity before we can find any knowledge in it; and this reduction is effected by the understanding. (See Critick, 98, *note*.)

8. What then are the *a priori* or purely mental elements furnished by the Sensibility, or are there any? There are two according to Kant—namely, Space and Time. In the perception of Space and Time we are passive, not active, and they consist of an indefinite multiplicity of parts without unity or combination. They are thus intuitions, not concepts—they belong to Sensibility, not Understanding. But they are *a priori*, for they are universal and necessary. You cannot set bounds to them even in imagination: you cannot annihilate them even in imagination. They have, moreover, this peculiarity,

that all other intuitions exist only in and through them. All intuitions of our bodily senses (external intuitions) exist only in Space. All intuitions of whatsoever kind exist only in Time. They are, then, *forms* of intuition—conditions without which other intuitions are impossible. But let not the reader imagine that they are forms imposed upon our intuitions *by the understanding*. No: they belong in all respects to the sensibility; they are not merely forms of intuition, but intuitions themselves (Critick, 98). "The mere form of external intuition," says Kant, "namely, Space, affords us *per se* no cognition. It merely contributes the manifold of *a priori* intuition to a possible cognition. But in order to cognise something in space (for example a line) I must produce a determinate conjunction of this manifold, by means of which alone an object (a determinate space) is cognised"[1] (Critick, 84). "Space represented *as an object*," he says, in another passage, "requires more than the mere form of intuition—namely, a *combination* of the manifold given by the sensibility. It thus presupposes a synthesis that does not belong to sense" (Critick, 98, note). Similar remarks are made as to Time. So far, there-

[1] In this and many other places I have abbreviated some of Kant's long sentences for the sake of intelligibility. I think the reader will find on a reference that my omissions have not lost the meaning of the original.

fore as Space and Time belong to the Sensibility, they contain, like all the other products of that faculty, nothing but an indefinite multiplicity in the perception of which we are passive. The understanding is required to arrange this multiplicity so as to form an object or a cognition out of it, just as much as when "the manifold" (as Kant calls it) is empirically given. Kant, indeed, is at great pains to prove that Space and Time are intuitions, not concepts, and belong to Sense, not Understanding. One of his leading arguments is, that general concepts contain the individuals called by the same name *under* them, not *in* them; whereas the reverse is true of Space and Time. Man contains European, African, and Asiatic *under* it, but not *in* it. Ireland contains Dublin, Cork, and Belfast *in* it, not *under* it. The distinction is expressed in ordinary Logical treatises by the terms, subjective parts, and integrant parts. Concepts have subjective parts, but intuitions only have integrant parts. The parts of Space and Time are integrant, and, therefore, Space and Time are intuitions.

But in what sense can we speak of an intuition—a manifold passively given—as pure or *a priori*? Here we must bear in mind that Kant undoubtedly takes for granted that there is a Something which acts upon us, and produces our sensations and intuitions. Whether a Philosopher, who limits the principle of Causality to the field of experience, can

legitimately reach this Something, is another matter: Kant distinctly postulates it. It exists, and affects us, though, as will subsequently appear, we can know nothing of it except its existence and action. But we cannot suppose that this acting Something is always the same, or, at least, that it always acts in the same way. If this were so, all impressions would be perfectly alike. The differences then between our various sensations and perceptions prove a corresponding difference either in the acting Something or in its mode of action. But if in all these various sensations and impressions we find one element fixed and invariable, we may conclude that this element arises from the nature of the mind acted on, and not from the nature of the unknown agent: for when we remove one unknown agent and substitute another it remains unaltered. Space is then *a priori* or purely mental in this sense, that we are so constituted that whenever anything affects us the passive representation of Space must arise along with the affection. Until something acts upon us Space exists in us only as a capacity, and not as an actual idea or intuition. Accordingly Kant (at least in his first edition) distinctly speaks of this "unknown Something" as producing in us "the representation of Space" (Critical Philosophy, by Mahaffy, III., 234). A fact well known to physiologists will illustrate the distinction. If my optic nerve receives an electric shock, a blow, &c., I feel a sensation of color; if the auditory nerve

is similarly acted on I perceive a sound. The one nerve will produce color only, the other sound; but the particular color or sound with its particular degree of vividness will depend on the particular nature of the agent employed. Now, according to Kant, the sensitive faculty is similarly constituted. It has a susceptibility, if I may so speak, for Space only, and whatever agent is employed the perception of Space will arise; but the other properties of the perception will vary with the nature of the agent. Space then is the mode in which the mind is (from its own nature) affected by the action of Something different from itself, or, as Kant says, it is "the formal capacity of the subject's being affected by objects" (Critick, 25). Time, on the other hand, is the mode in which it is affected by its own activity (Critick, 41). The understanding is capable of exerting many modes of activity, and each of these produces its own passive affection on the sense; but no matter what mode of action is exerted one part of the corresponding affection remains unaltered. That part is Time. Space and Time therefore depend solely on the nature of the mind itself. The one arises as soon as anything acts on it, the other as soon as it acts itself. The mind is so formed as to make the arising of both necessary, as soon as an external or internal energy enters into play. These then are the two forms of the Sensibility—the two kinds of pure or *a priori* intuition, and there are no others.

Space is the form of the external sense, and Time of the internal. A somewhat similar doctrine is maintained by Mr. Hodgson in his work on Space and Time.

9. Kant has now reached the point where the problem of pure Mathematics can be solved. Its synthetical judgments depend upon pure or *a priori* intuition—that is on Space and Time. To know that two right lines cannot enclose a space I must draw the lines either on paper or in imagination; but the property depends only on the nature of that pure space which is common to all my external intuitions, and therefore it is true necessarily and universally. Every sensible object occupies space, and is therefore subject to the laws of space. I need hardly say that the truth of the spacial law that two right lines cannot include a figure is not in the least affected by the fact, that no object may be found in space which is accurately bounded by right lines. Pure water consists of oxygen and hydrogen only. This is not the less true because no specimen of water in the world may be absolutely pure. It is the same with Arithmetic as with Geometry. If I want to try what 7 and 5 amount to, I must add 7 objects to 5 objects: but if I select my objects so as to contain nothing but pure intuition (for example, points in space), I can perceive that the result is true universally and necessarily—independent of experience. Thus I learn the synthetical *a priori* judgment, $7 + 5 = 12$.

Kant recognises no Pure Mathematical Science except Geometry and Arithmetic. He mentions Mechanics also in the Prolegomena, but in the Critick he more correctly refers it to Pure Physics. Both these Mathematical Sciences he bases on Space, but Time also necessarily comes in to a certain extent in both instances. If, for example, I wish to prove that the order of multiplications is indifferent (or that $ab = ba$), I can best effect my object by taking points in space arranged in rows and columns when it is obviously indifferent whether I add them up by rows or columns; but even here two successive operations are necessary to perceive the equivalence. On the other hand I do not think there is any *general* method of proving this equivalence which does not involve space. So, even in Geometry Time frequently comes in. In superposition I cannot at once imagine the triangle in its former position, and superposed on the other. In his famous fifth proposition Euclid further supposes that one of the superposed triangles is turned round, and the element of time is more manifestly involved in the case of revolution. When I suppose a circle to be generated by the revolution of a line, a sphere by that of a circle, or a cone by that of a triangle, I necessarily suppose each of these figures successively occupying different positions. Accordingly Kant says that "Time explains the possibility of so much synthetical *a priori* knowledge as is exhibited in the general doctrine of

motion which is not a little fruitful" (Critick, 29, 30); while in another place he says that motion considered as this imaginary description of a space by the subject belongs to Geometry (Critick, 95, note). He adds, however, that "motion *of an object in space* does not belong to any pure science" (p. 95); for it supposes something movable, and this something movable is given only by experience. This Motion is, therefore, not to be regarded as a pure intuition like Space and Time (Critick, p. 35).

10. Closely connected with these results are Kant's views as to the nature of sensible objects. If space and time exist only in the mind, things *in* space and time must exist after the same manner. It is impossible to regard space and time as mental additions to a thing (or rather things) existing independently of us which we have only to detach in order to perceive the thing as it really is: for we cannot detach them without annihilating the thing altogether. Colour, sound, hardness, and all the other qualities of matter can exist nowhere but in space, and even the mental qualities can exist nowhere but in time. Indeed, when closely examined, all these qualities are resolvable into sensations (external or internal) whose existence out of the mind is an absurdity. Space is the form of all external sensations, time of all internal: and it is idle to attempt to detach the matter (as Kant calls it) from the form. Moreover, even if we could do so

the matter would be just as mental, just as subjective as the forms. We must, therefore, abandon all hope of knowing Things as they exist independent of the mind by means of Intuition and Sensibility. Whether we can know them by means of Thought and Understanding will be a matter for subsequent inquiry. We cannot intuite them. Sense, whether external or internal, reveals to us nothing but states of our own mind—caused, perhaps, by realities existing independently of us—but still in themselves nothing but mental states. It gives us, as Kant says, appearances not things in themselves (or things *per se*)—phænomena not noumena. Not that he doubts the existence of these things *per se* (for how, says he, could there be an appearance without something that appears?) but we can intuite appearances only. Why we regard some of these appearances as real objects, and others as merely imaginary or mental, will also be a matter for subsequent investigation. The first part of the Critick—the Transcendental Æsthetic or Science of the *a priori* elements of the sensibility—cannot effectually explain it. It only ascertains the forms of our sensibility, and explains the immediate consequences of their discovery. It explains the necessity of Mathematical truths. It cautions us that we intuite nothing but phænomena. It warns us not to attach these mental forms to things *per se*. It reminds us that we are not even at liberty to ascribe them to the

intuitions of any other beings than ourselves. To us intuitions can be nothing else than sensations in time and space, but there may be other beings whose outlook into the world of being *per se* is much more extensive.[1]

11. So much for the *a priori* doctrine of the Sensibility or, as Kant calls it, the Transcendental Æsthetic. We now pass to the consideration of the *a priori* elements of Thought (or of the understanding in its widest sense), which he designates Transcendental Logic. This he divides into two parts, Transcendental Analytic and Transcendental Dialectic; and the Transcendental Analytic is again divided into the Analytic of Concepts, and the Analytic of Principles. In this division and subdivision we find the three branches of the understanding (in its widest sense) already alluded to, namely, the Understanding (proper), Judgment, and Reason. The Analytic of Concepts relates to the first of these, the Analytic of Principles to the second, and the

[1] Kant makes use of another argument to prove that we can only know appearances and not things in themselves, namely, that our knowledge of objects consists of nothing but mere relations. All that I know of objects is reducible to the relations of place, change of place (motion), and the laws of motion—or to the relations of permanence, succession, and coexistence. Now, by means of mere relations we cannot know a thing in itself, consequently we only know appearances of things, or the relations of things to us.

Dialectic to the third. The first two involve the solution of the question, How is Pure Physics possible? The third deals with the question, How is Pure Metaphysics possible? The products of the understanding will be best ascertained when we obtain them in the purest form—when they are as little mixed up with the data of Sense as possible. We, therefore, turn to (the Aristotelian) Logic in which we find the laws and forms of Thought separated from intuition as far as it is possible to do so. Its products here are Concepts, Judgments, and Syllogisms. Kant aims at ascertaining what *a priori* elements are involved in each. But we must treat of Concepts and Judgments before we attempt to deal with Syllogisms. We must take up the Transcendental Analytic before we enter upon the Transcendental Dialectic.

This Transcendental Analytic is Kant's most elaborate performance. It cost him, as he says, the greatest amount of labour, and it is probably the finest extant specimen of the application of the deductive method to Psychology. But it must be confessed that it contains many difficulties and obscurities, and probably no commentator can proceed to expound it with the confidence with which a real student of the Critick can deal with the Æsthetic, or with part of the Dialectic. Much of its obscurity indeed exists only in the first edition of the Critick; but even in the second it presents more than one dif-

ficulty. I proceed to give my own views of its contents without feeling in all cases satisfied as to their correctness. Kant took ten years to work out this part of the Critick, and I believe it would take most men as long to follow him; but it will probably prove the most lasting monument of his genius.

12. In seeking the *a priori* elements of Concepts we must observe that every Concept has necessarily an extension (real or imaginary), and that the only use we can put it to is to predicate it of the whole or some part of this extension, or in other words, to *judge* by means of it. It is then the predicate of a possible judgment. But the forms into which all possible judgments must fall have been ascertained and enumerated by logicians. Judgments differ from one another in four respects, namely, as to Quantity, Quality, Relation, and Modality. Under each of these heads, again, we find three different kinds of judgments. Thus as regards Quantity every judgment (or proposition) must be universal, particular, or singular; as regards Quality it must be affirmative, negative, or what Kant calls infinite, which is affirmative in form, but negative in meaning (as, A horse is irrational); as regards Relation it must be categorical, hypothetical, or disjunctive; and finally, as regards Modality, it must be problematical, assertorial, or apodeictical—that is, it must either assert that A *may be* B, that A *is* B, or that A *must be* B. There are thus in all twelve possible

classes of judgments which are again reducible to four heads. Every man, however limited his experience may be, can form any one of these twelve kinds of judgment; no man, however extensive his knowledge, can form a judgment not reducible to some one of these heads. The terms of these judgments are of course borrowed from experience, but the forms are independent of experience or *a priori*. Experience can neither increase nor diminish their number. We cannot even conceive another being forming a judgment which is not reducible to one or other of these heads.

But while the enumeration is evidently complete many persons will be of opinion that it is redundant, and might be reduced to a smaller number. Logicians do not recognise Kant's infinite judgment at all, they reduce singulars to the class of universals, and they often attempt to reduce hypotheticals and disjunctives either to each other or to the Categorical forms. The latter reductions, however, are in general so forced and unnatural that no one would have attempted them except for the purposes of system. No ordinary man would think of saying, Every case of the barometer falling is a case of its being about to rain, instead of, If the barometer falls it will rain; nor would he say, If any electricity is not positive it is negative, instead of, All electricity is either positive or negative. And indeed we might as easily turn a categorical judgment

into a hypothetical or disjunctive as perform the converse operation. Every man is mortal might be twisted into, If any being is a man he is mortal, or, Either every being is mortal or he is not a man. The only one of Kant's heads which seems to require defence is the separate classification of infinite judgments. The judgment, The Soul is immortal, differs from the judgment, The Soul is not mortal, according to Kant, in the following respect: In the latter judgment I am only thinking of the class mortal, and excluding the soul from it; but in the former I have formed the immortals (or non-mortals) into a class to which I refer the soul. Further, the class immortal presupposes the class mortal, and has no meaning but by reference to it, and these two classes together constitute the sum-total of all possible existence. Before, therefore, I can form a class of immortals (or non-mortals) I must have thought of the whole sphere of possible beings and divided it into mortal and immortal; which is not at all necessary in the corresponding negative judgment. Infinite judgments may therefore be fairly regarded as a distinct class.'

' Kant seems to argue for the completeness of his division in another way, viz., that the first and second class of judgments under each head are opposites, and the third arises from a combination of them. Thus unity (which belongs to the singular judgment) is opposed to plurality (involved in the particular), and totality belonging to the universal consists of plurality regarded as unity. So of the other three classes.

Each kind of judgment then involves a different mode of connecting or uniting the concepts involved. (I here use the word concept to denote the members of the judgment which need not be concepts in the strict sense; for the members of a hypothetical or disjunctive judgment are themselves judgments). This mode of connexion is the *a priori* or mentally contributed portion of the judgment; the particular terms connected vary in different cases, and are for the most part supplied by experience. The forms of Thought then—the *a priori* elements of the understanding—are to be found in these connecting forms. These are Kant's famous Categories. The singular judgment plainly involves the notion of *unity:* its subject must be regarded as one. The particular judgment involves the notion of *plurality*. It would be absurd to say, Some men are black, if there was but one man in existence. The universal judgment involves the notion of *totality*, for it brings in the idea of a *whole* class consisting of many individuals. The Categories of Quantity, then, are Unity, Plurality, and Totality. The Categories of Quality are similarly found to be Reality, Negation, and Limitation. The conformity of the latter notion with the infinite judgment is the only one of these which needs explanation. Kant explains it by saying that in such a judgment we *limit* the whole sphere of possible existence by excluding from it a definite class, e. g.

when we judge The Soul is immortal, we limit the sphere in which we place the Soul by striking the class mortal out of the whole field of possibility. The Soul is in some part of the rest of this vast field, but the judgment does not tell us where. Passing to the Relation of judgments, when I affirm that Man is mortal, I assert that the attribute mortality inheres in the substance man, and generally if I say A is B, I mean that the attribute B exists in the substance A. The Category involved in the Categorical judgment is therefore that of Substance and Accident. That the Category involved in the Hypothetical judgment is that of antecedent and consequent is sufficiently obvious. Kant designates it Cause and Effect. The different members of a Disjunctive judgment are mutually exclusive, but taken together they make up a whole or total of cognition. When I say, Either A is B, or C is D, I mean that these two cases include the whole range of possibility. This relation Kant calls Community or Reciprocity. These are the three Categories of Relation. That the notions involved in the three judgments of Modality are possibility, existence, and necessity, requires no proof. We have thus obtained twelve Categories or Forms of Thought corresponding to the twelve forms of judgments, and these twelve constitute a complete catalogue of the *a priori* elements of Concepts or possible judgments. We may feel certain that no further ele-

ments remain to be discovered, because we can frame no judgment that cannot be reduced to one or other of these forms.

13. But how can we justify the application of these forms to objects, or prove their objective validity? They are purely subjective arising from the nature of the mind itself whereas the object is usually supposed to be something that exists quite independently of the mind. Why then may there not be an object to which the mental forms of unity, plurality, and totality (or of substance and accident), are wholly inapplicable—an object which we may perceive (or intuite), but of which we can judge nothing, at least legitimately? The question is unanswerable so long as we believe that the objects of our perceptions are independent of the percipient mind; but this doctrine has been already rejected in the Transcendental Æsthetic. Kant had there argued that we intuited nothing but states of our own mind; but even granting this we have not got rid of the whole difficulty, for the object is given by the Sensitive Faculty which is quite distinct in its nature and functions from the Faculty of Thought. Why therefore must everything that the Sensibility presents us with be subject to the laws of the Understanding? Why may not the former fulfil its office without the aid of the latter? and if so, why must its products all fall under the control of the Understanding? If the results of the Æsthetic renders it

unnecessary for us to assume a miraculous harmony between the percipient mind and the thing *per se*, must we not still assume such a harmony between the two distinct faculties of sense and understanding?

Substantially Kant's solution of this difficulty is as follows: It is true that Sense might exist without understanding, but then it would present us with no *object*; for an *object* is not a mere confused multiplicity, but a multiplicity combined in a definite manner. By mere sight, for example, I might perceive what I now call the sky, the sea, and a ship, all forming a single confused mass; but to separate this mass into three definite combinations called sky, sea, and ship, I must call the understanding to the assistance of the senses. Without understanding then there could be no object and no experience. A mere sensation is not *experience* in Kant's use of the term. Experience with him is equivalent to empirical *knowledge*—to the *cognition* of empirical *objects*. Now, since an object is a *combination* of the manifold passively given by sense, and since the faculty which combines is the understanding, no object, and therefore no experience, is possible without the understanding. But the understanding, we have seen, is limited to twelve modes of combination—those indicated by the twelve categories. Consequently every object of experience, and all experience must involve one or other of these categories. Indeed we might have reached this conclusion in

another way. Experience is empirical knowledge, and all knowledge is a judgment. All knowledge therefore must involve a form of judgment—a Category: and so the Categories are conditions of experience, and of all objects of experience. The objective validity of the Categories is thus established within the domain of experience. This is what Kant calls the Deduction of the Categories, deduction meaning a justification of their employment. And as every object of experience must fall under a Category (or rather indeed four Categories, one under each head), so it is not difficult to see that the Categories cannot be employed beyond the domain of experience. For they are merely forms for combining a manifold, and they cannot be used until this manifold has first been supplied. But to man at least this manifold is only supplied by means of Sensibility, and consequently the Categories have no application to anything which is not given by the senses—to anything that lies beyond the field of experience. They hold good of every empirical object, but we must not attempt to extend their employment any farther.[1]

[1] Kant, however, attempts another kind of Deduction also. All states of consciousness have this at least in common, that they are *mine*. But what is meant by calling them *mine?* Merely this, that I can bring them together and *unite* them in Consciousness either immediately or mediately. If I could not do this—if there were an impassable chasm between different states of consciousness

14. But all this appears as applicable to the imaginary as to the real object; for is not even an imaginary object a combination of the manifold instead of a mere loose mass? And here the reader may be apt to think that Kant has omitted imagination entirely in his analysis of the mental faculties, for it does not appear to be reducible either to Sense or Understanding. But according to Kant it is a mere combination of the two. So far as it is passive it is merely Sense—a weak sensation, or a decaying sense as other philosophers had called it. This is what Kant terms Reproductive imagination;

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so that I could not proceed by an unbroken chain from any one state to any other—this would come to the same thing as if a part of them were not *my* states at all. The reader will recollect a similar train of thought in Locke's Chapter on Personal Identity. This I, or Ego, then, which joins together all states of consciousness, however different, is not the Ego of internal intuition, which is itself a mere state of consciousness, and differs at different times. The conjoining Ego is the Ego of Thought; it is, as Kant says, not so much an *Ego* as an *I Think*. The identity of this *I Think*—this conjoining act—in all consciousness is absolutely essential to knowledge, even to the distinguishing of *my* consciousness from *yours*. But every judgment is a conjoining act—an uniting of different states of consciousness by means of this *I Think*; and on the other hand all combining acts are reducible to judgments, so that the *I Think* can never actually conjoin except by means of a judgment, and therefore by means of a Category. The Categories are the sole subordinate forms of the *I Think*, and therefore are as essential to the knowledge and experience as the *I Think* itself.

and if in the first edition of his *Critick* he speaks of the Synthesis of Reproduction or the Reproductive Synthesis, we are not to infer that he ascribes any synthetical operation to this kind of sensibility. The misleading expression at all events is struck out of the second edition which contains his matured exposition of the system. On the other hand, in so far as imagination is active—Productive—it is merely a particular kind of understanding. "That which conjoins the manifold of Sensuous intuition" says Kant in one passage, "is imagination, a mental act to which the understanding contributes unity of intellectual synthesis, and the sensibility manifoldness of apprehension." (*Critick*, 100; see also 93 and 99, note). Imagination therefore forms no addition to the list of faculties already considered. But still the imaginary object differs from the real one. This difference Kant thinks consists in the necessity or contingency of the combination. When I contemplate a house, for example, if I can make it change colour, size, and local situation at pleasure, I conclude it to be the offspring of my imagination; but if it remains fixed and unalterable in these and all other properties, then I conclude the house to be a real one. At any given moment indeed the imaginary house is a particular combination of the manifold, but then it does not continue to be the *same* combination from one moment to another. Thus *experience*, as opposed to *imagination*, is only possi-

ble through a fixed or necessary connexion of perceptions—a connexion which I cannot reverse. This arises from regarding the object fixedly under the same Category (or Categories), for the Categories are modes of necessary connexion in representations, as indeed might have been inferred from the criteria of an *a priori* element already mentioned. But the principles of the pure understanding—the synthetic *a priori* judgments to which these Categories ultimately lead us will afford a more decisive test of phantasm and reality.

15. Every object of experience then falls under a Category, and it must always fall under the same Category if we are to regard it as a reality not a chimera. But why must all the manifold given by the Sensibility be capable of combination so as to form objects? Why may not all or some of it remain loose and disunited, and resist all our efforts to conjoin it? An answer to this question will be found in the I Think treated of in the preceding note: for this loose manifold would have no relation to the *I Think*, since the Categories are the subordinate forms under which alone it is applicable to sensible data; and being out of relation to the *I Think* this manifold could not come into consciousness at all. We could, therefore, never become conscious of an utterly disunited manifold, and it would be for us nothing. It might, as a latent modification (to use Hamilton's phrase), affect our subsequent conscious-

ness, but we could have no direct knowledge of it whatever. Another answer, perhaps, might be derived from the doctrine of the Schematism with which we shall have to deal presently.

16. Such is the Analytic of Concepts. It investigates the *a priori* elements of Concepts—of the Understanding Proper. The reader may perhaps be rather disposed to think that it investigates the *a priori* elements of Judgments, and is thus rather a critick of the Faculty of Judgment than of the Understanding Proper. But we have only examined the conditions of *possible* Judgments, and Concepts were shown to be possible Judgments since we can only employ them to judge by means of them. We have not arrived at any conclusion as to what *actual* Judgment we should form in any particular case. We have not learned what kind of empirical object we should regard as substance or cause, and what kind we should regard as accident or effect. We have laid down no rules for judging. Indeed all that has hitherto been said might have been true with a widely different experience from ours. The Categories are modes of uniting a (passively given) manifold; but there is nothing in their nature to restrict them to a manifold in Space and Time. If a passively-perceived manifold was given us in any other way it could still be united into objects by means of the Categories, and it would not form an object until so united. The Categories are there-

fore applicable, as Kant says, on the sole condition that our intuition is sensuous (passive) not intellectual (spontaneously active). Actual Judgments of experience require more than this. We must not merely have our Category, but know what objects to rank, or (as Kant would say), to *subsume* under each Category. The Critick of the Faculty of Judgment, or the Analytic of Principles, will investigate the *a priori* elements involved in this process—the conditions of subsumption so far as they are *a priori* and arise from the mind itself.

It is no easy matter to see how the raw materials given by the Sensibility can be subsumed under the Categories. Most of our concepts are formed by abstraction from objects, and being in fact partial representations of what is contained in these objects, their applicability to them is at once manifest. I can subsume this page under the concept of a rectangle, because I see that it is rectangular. I can subsume a shilling under the concept of a circle, because I see or feel that it is round. But it is quite otherwise when I compare the Categories with sensible objects. I can neither see nor feel that the table is a substance, nor that the fire is the cause of heat. This is evident from what has been said already; for since the Categories are the pure offspring of the intellect or understanding they cannot be detected by analysis in the mere data of sense. The sensible manifold and the Category are in all

cases perfectly heterogeneous, and it is impossible to find anything in the former which would authorise us to subsume it under the latter, still less to indicate under *what* Category it should be subsumed. Thus the Category of Substance and Accident expresses nothing but the relation of Subject and Predicate in a judgment. I mean by Substance merely Subject, and by absolute Substance merely that which is always subject and never predicate. But how am I to identify such a thing if I meet with it in experience? How do I know whether the table before me is a substance in this sense? The Category of Cause again means mere logical antecedent (not *temporal* antecedent; for we have dealt so far only with the logical forms of judgment), and how am I to know that this or that thing is such an antecedent to anything else? Unless I can obtain some clue to guide me in this application I am met by an insuperable difficulty.

This clue must be afforded by means of a connecting link—a something which is at once sensible and intellectual, and thus brings the manifold of intuition into relation with the Categories of the understanding. The Critical Philosophy has already given us a hint as to the nature of this connecting link. All the products of the Sensibility occupy Time; for even the data of the external senses can only come into consciousness through the internal sense and its form. But Time, we have seen, is the man-

ner in which the mind is affected by its own activity; and every kind of mental activity produces its own peculiar effect on the internal Sense. There thus arise exactly as many *a priori* determinations of Time as there are kinds of mental activity—that is to say, as there are Categories. To each Category corresponds its own Time-determination, or, as Kant calls it, its own Schema. When therefore an empirical object is found to fall under any of these Schemata we can at once refer it to its proper Category. Every object of experience occupies a portion of Time; every portion of Time falls under one of the Schemata, and by means of this Schema it can be subsumed under the Category. The Schemata then are the *a priori* elements of (actual) Judgments, and their discovery and enumeration is the task of the Critick of the Faculty of Judgment. The Schema of the Category of Quantity according to Kant is Number, which means a Series in Time. In apprehending an object I always successively add part to part, and thus generate a series of determinate magnitude. Kant does not trace out specially the Schemata of the Categories of Unity, Plurality, and Totality. In the Category of Unity I presume we should stop at the first term of the Time-series: for the Category of Plurality we should represent the addition of unit to unit without laying down any determinate limit; and for the Category of Totality we should limit the number of units and complete

the addition up to this number. The Schema of the Category of Quality is the filling up of Time with a sensation. We may speak of the time as being more completely filled when the sensation is more vivid, and less completely filled when the sensation is weaker. If the sensation is sufficiently vivid the present moment is so filled with it that it seems impossible to attend to, or even be conscious of any other sensation simultaneously; but when it becomes weaker we have leisure to perceive other sensations also. This seems to be the idea that Kant intends to convey by the Filling up of Time; and it is evident that we can represent this filling as taking place by a gradual increase from zero (empty time) to any given degree of vividness, or by a similar descent from the sensation of the moment to zero. Again Kant does not here give in detail the Schemata of the Categories of Reality, Negation, and Limitation. In the first case we should, perhaps, represent the sensation as occupying the present moment to the exclusion of everything else; in the second the sensation as entirely absent from the present moment; in the third the sensation as occupying the present moment along with others. The Schema of the Category of Relation is the *Order* of Time. Kant here mentions the subordinate Schemata specially. The Schema of the Category of Substance is the *Permanence* of the object in Time; the Schema of the Category of Cause is its regular

Antecedence in Time (i. e. *Succession* in Time determined by a fixed law), and the Schema of the Category of Reciprocal Action (or Community) is the *Simultaneity* of objects in Time. The Schema of the Category of Modality according to Kant is Time itself as related to the Existence of the object. Here we seem to have fallen back on one of the forms of the Sensibility which would thus become mixed up with the forms of Thought. But the truth is, that the mere form of the Sensibility only contains the manifold of Time in a confused mass, and to regard all this manifold as belonging to *One* Time which contains all these parts, and each of them in its proper place, we require not Sensibility but Understanding. The Schema of the Category of Possibility is the existence of the object at some time or other (or rather, perhaps, the representation of such an existence). That which cannot be represented as occupying any part of time is not a possible object. The Schema of the Category of Existence is the occupation of a fixed moment of time (not necessarily the present moment, for this Existence is not to be limited to *present* existence), and the Schema of the Category of Necessity is the existence of the thing at every moment of time. "The Schema of the Category of Quantity" says Kant, "represents the Generation (synthesis) of Time itself in the successive apprehension of an object; the Schema of Quality, the synthesis of sensation with the representation of

time, or the Filling up of time; the Schema of Relation, the relation of perceptions to each other in all time; and the Schema of Modality and its Categories, time itself as the correlative of the determination of an object—whether it belongs to time, and how. The Schemata therefore are nothing but *a priori* determinations of time; and these (following the arrangement of the Categories) relate to the *Series* in time, the *Content* in time, the *Order* in time, and finally to the *Complex or Totality* in time." (*Critick*, 112).[1]

17. We have now reached the point where we can answer the question, *How is Pure Physics possible*, and draw out a table of the Synthetical *a priori* judgments which form the basis of this Science. For every object of experience must come under a Category, and every Category has its appropriate Schema. Each Category is therefore always com-

[1] Kant speaks of all our concepts as having their own Schemata, so that this is no peculiarity in the Categories. As applied to ordinary concepts the distinction seems to be this: A man may be able to recognise a particular kind of animal or plant (suppose) when he meets one, but would find great difficulty in drawing a specimen (or several different specimens), in imagination or on paper. For this last purpose he requires not merely to know the collection of attributes belonging to the plant or animal, but also to possess a general rule for sketching out such a collection in imagination. This collection of attributes is the concept, and the general rule for realising it in imagination is the schema.

bined with its Schema in the object, and as the Schema cannot be obtained by a mere analysis of the Category (or *vice versa*) the judgments which assert the combination (or co-existence) of the Category with the Schema (in the same objects), are always synthetical. They are likewise *a priori* since all their elements are so. They are necessary conditions of experience, and it has no other necessary conditions—at least from the mental or subjective side. These judgments will, therefore, form the Principles of Pure Physics, and the foregoing investigation will have shown how another class of synthetical *a priori* judgments are possible, as well as how to determine the precise number of principles contained in this class.

These *a priori* synthetical judgments are divided into four sub-classes following the table of Categories. The first kind, which depend on the Categories and Schemata of Quantity Kant calls Axioms of Intuition; the second, which depend on the Categories and Schemata of Quality, are designated Anticipations of Perception; the third, depending on the Categories and Schemata of Relation, are the Analogies of Experience; and the fourth, depending on the Categories and Schemata of Modality are Postulates of Empirical Thought. As regards the first two classes, Kant does not draw out the three subordinate principles of Quantity and Quality, but contents himself with laying down the general prin-

ciple on which all three depend. When he comes to the Analogies of Experience, however, he gives both the general principle and the three subordinate ones, while on arriving at the Postulates of Empirical Thought he omits the general principle and gives the three special ones only. His table is not, therefore, quite perfect in form, but it is probable that no really important principle is omitted.

18. The general principle of the Axioms of Intuition is, that *All intuitions are extensive quantities* (or possess an extensive quantity). They are wholes made up of parts gradually joined together by the understanding in uniting the sensible manifold into an object. Hence an atom cannot be an object of possible perception. By an atom is here meant a body which does not consist of parts external to each other; or in other words, which either does not occupy a space, or occupies an indivisible space. The Axiom does not prove that we may not meet with bodies which occupy finite and divisible spaces, but are not *physically* separable into parts. Every part of space, however, is divisible, and so is every portion of time; and hence every object of experience is mentally divisible—it is capable of being divided into a number of parts at least in thought. The general principle of the Anticipations of Perception is, that *All objects of experience have an extensive quantity*—that is, a particular degree of reality (reality in the sensuous world is measured by

sensation). They all fill a certain portion of time (as was stated in the principle of the Axioms), and they fill it more or less completely (which is the principle of the Anticipations). The Sensations which they give us are all capable of becoming more or less vivid than they are, and in becoming less vivid they may fade away imperceptibly through every intermediate degree between that in which they are now felt, and absolute zero. From this principle it follows that no experience can prove an absolute vacuum ;[1] for since sensations may exist in every degree down to absolute zero, the space which we take to be void may be filled with possible sensations too weak to become objects of distinct consciousness to us, but which would become so if we had finer senses. These two classes of principles Kant calls Mathematical Principles, because it is by means of them that we are enabled to apply the Mathematical calculus *to Physics* (for of course they are quite distinct from the principles of Mathematics which were explained in the Transcendental Æsthetic). He also designates them Constitutive Principles, because they give us some information with regard to the actual constitution of objects of experience; which it will be seen the other two classes do not.

[1] A vacuum *within* the world is excluded by this Principle. The question of a vacuum *beyond the limits* of the world is treated of under the First Antinomy of Pure Reason.

19. The Analogies of Experience Kant treats of at greater length. Their general principle is, that *Experience is possible only by the representation of a necessary connexion of perceptions.* Experience here means empirical knowledge (not mere sensation), and the meaning of the general principle will be best understood from the three subordinate ones to which we next proceed. Kant, however, makes use of an argument to prove both it and its subordinates which has not been directly asserted before. We are never conscious of pure or absolute Time, because the representation Time is in fact only the mode in which we are affected by our own activity. This being so, we cannot by perception or immediate consciousness assign to any object its appropriate place in time as we might do if all time were (consciously) laid before us at once. Being unable therefore to determine by direct perception what is permanent in time, and what is transitory—what is prior, posterior, or simultaneous—we must (if things are to have fixed positions in time at all), determine this by some fixed rule of the understanding, such as is afforded by a Category and its corresponding Schema; and as all real things—all objects of experience—have such fixed positions, they must all be subject to these rules of the understanding for determining their connexions—rules which we have seen are *a priori*, and therefore possess the characteristic of necessity. (The reader will observe, that

while Kant often proves the *a priori* nature of an element by its universality and necessity, he sometimes reverses the process, and proves its universality and necessity from its *a priori* character. Here the Categories are proved to be *a priori* from their correspondence with the logical functions or forms of Judgments; and having proved this we may argue from it to their necessity.)

20. The first Analogy of Experience is, that *In all phænomena* (appearances or objects of sense) *substance is permanent, and its quantity in nature can neither be increased nor diminished.* Permanent means existing in all time—taken in which meaning the second clause of the principle is a mere amplification of the first. In every empirical object then there is something which exists through all time. This something is of course a phænomenon or appearance, and not a thing in itself; for everything that exists in time is a mere appearance (as was proved in the Transcendental Æsthetic), and in this respect it is of no consequence whether it exists in all time, or only in a part of it. "Substance in the phænomenal world," says Kant, "is not a thing in itself. Phænomenal substance is not an absolute subject. It is merely a permanent sensuous image, and nothing more than an intuition." (*Critick*, 327.) But this seems to involve us in a new difficulty. For if the empirical object is nothing but a group of sensations (ordered in space and time), existing in my mind, how can I

call any part of it permanent? since it is manifest that this group is not permanently in my consciousness. The answer appears to be that a phænomenon is not a group of *actual* sensations. It is a group of *possible* or *potential* sensations. The table before me exists when neither I nor any one else perceive it, because on certain conditions we *would* perceive it. Matter thus becomes, in accordance with the views of Mr. Mill, a Permanent Possibility, or Potentiality, of Sensations existing in a definite space and time; though Mr. Mill would probably not employ the word Permanence with the full significance of Kant—existence in all time. But then what *is* permanent in the object? In the table, for example, its shape is not permanent, nor its magnitude, nor its colour, nor its local situation; for I can alter all of these by the employment of proper means. To this question Kant can only give an indefinite answer, for, according to him we can only determine *a priori* that *something* is permanent, and we cannot decide what part of the object is permanent without the aid of experience. But he asserts that its *action* is permanent, and that alter it how we will we cannot prevent it from acting in some way or other; and he even indicates one kind of action of which we can never deprive it, namely, resistance to a compressing force, or impenetrability—the ultimate incompressibility of Sir W. Hamilton. It will always resist this pressure, and the resistance would ulti-

mately become insuperable—we could not compress it into nothing. This of course is only applicable to matter, substance in space. There is no kind of mental action whose permanence we can affirm, nor can we even affirm that there *is* anything permanent in the phænomenal mind. For the phænomenal mind does not form a *distinct* empirical object. The object, as it occurs in experience, consists of a body and a mind, and the permanent part of this complex phænomenon may be that (or a part of that) which we call the body. The First Analogy of Experience therefore does not authorise us to say that Minds cannot begin or cease to exist; and the immortality of the soul, if proveable at all, must be established on different grounds. This, however, is anticipating what will be said hereafter in dealing with the elements of Pure Reason, and answering the question, How is Pure Metaphysics possible? This Permanent is a condition of all experience. On it rests the notion of *Change*. A change means a succession of two different states *in the same thing*. If the thing be not the same there is no change. Hence Kant's paradox: *Only the permanent is subject to change*. This Permanent is of no slight importance in Philosophy. Existing through all time it binds together all human experience into one whole. Indeed it is the Permanent which gives unity to Time itself, for we should not regard all times as forming parts of the same continuous time if we did not

suppose that there was some one thing which existed through all times, and thus linked them all together. It is this, too, that especially distinguishes dreaming and imagination from reality. Absolute permanence indeed is not a matter of experience, but the vanishing of an object may often prove that it is *not* permanent, and therefore not real. That which vanishes instantaneously we generally regard as illusion—apparition; that which lasts for some time we regard as real. But without waiting to see how long the object before us will last, we can try at once whether it *acts* and in particular whether it *resists* our muscular energy; and here again, if it fails to do so we immediately infer its unreality—though perhaps if it persisted in remaining before us we might be shaken in this belief. That which distinguishes imaginary or illusory objects from real ones, even according to common observation, is their want of permanence and their inaction; which affords no slight confirmation of the Kantian conclusion that permanent action is the distinguishing characteristic of real empirical substance. How far this Analogy is connected with the modern theory of the Conservation of Force I leave it to others to trace out. We have at all events reached one important Principle of Pure Physics.

21. The second Analogy of Experience is the celebrated Principle of Causality, or, as Kant states it, *All changes take place according to the law of Cause*

and Effect. Kant's cause is indeed only a temporal antecedent, but then it is a necessary antecedent,[1] or, to speak more correctly, an effect is a necessary sequent. Every event—everything that really begins to exist—must have such a necessary antecedent, otherwise I would regard it as a mere offspring of my imagination, and not as a fact of my experience. Indeed it is only on this supposition that I can affirm that one thing really is later or earlier in time than another. I feel heat, and on looking about I see the fire, or on the other hand I first perceive the fire, and then on approaching it I feel the heat; but as the first of these perceptions does not warrant me in saying that the heat existed before the fire, so neither does the latter justify me in saying that the fire existed before the heat. I see a man fall off the top of a house. At the commencement of the fall I see the man simultaneously with the top of the house, and at the end of it I see him simultaneously with the bottom. Have I not then as much reason to say (if I confine myself to mere perception), that the bottom of the house existed later than the top, as I have to say, that the man's position at the bottom was later than his position at the top? My apprehension, says Kant, is always

[1] Unconditional antecedent, as Mr. Mill has it; but Kant does not think unconditionalness could be proved by experience, though in some cases conditionalness might.

successive, and in vain shall I go about to determine by means of it whether that which I perceive first is really first or *vice versâ;* or indeed, whether the whole of what I perceive is not coexistent. The man I met this morning may have existed fifty years before the man I met yesterday; but I have no perception of the places which things occupy in absolute time, and therefore intuition throws no light on such a question. But if I am to regard a thing as real and not mere illusion, I must suppose it to have some fixed position in time; and this fixed position is only possible by relation to something else. All our names and measures of time are relative; they only fix the period with reference to some other period, and this other period itself is always fixed by some event which then occurred. It is the same with space, as we shall see under the next principle. There also the place of a thing means its distance and direction from something else. We have no idea of the position of anything in pure space, or pure time. If then I am to regard anything as occupying a fixed position in time, I must do so by regarding it as earlier or later than some other thing; and this not merely in my perception (for we have seen that that is quite contingent), but in the connexion of the things themselves. Now, the only way in which this can be done is by means of the category of cause and effect. The cause (or whatever coexists with the cause) is really anterior in time to the effect

(or whatever is simultaneous with it). In this way alone does succession *in things* become cogitable. By things, of course, I mean phænomena, for nothing but phænomena could exist in time or succeed one another in it. But we have seen under the last principle that phænomena are not mere sensations. They are permanent possibilities of sensations—groups of possible sensations. But though a part of this group is absolutely permanent, other parts of it may and do change; and indeed the very notion of change is an alteration of some members of the group, while the others remain fixed. Alter all of them and there is no change—there is an extinction of substance which the first analogy declared to be impossible. And retaining this language (which is rather Mill's than Kant's) we may see how impossible it is to fix the positions of phænomena in time by mere perception, since the change in the group of possible sensations usually takes place when we are not looking on; and even when we are looking on how can we be sure that we have observed its whole extent? But Kant's argument goes beyond this. He points out that what appears later in the group (in mere perception) may not be a change at all, but merely one of the coexisting members coming from possible into actual consciousness. Intuition then failing us, we must have recourse to thought, and it is only by the Category of Causality that we can fix what is earlier or later,

not merely in our actual consciousness, but in the condition of those permanent possibilities of sensations which we call objects of experience. All changes, therefore, in these objects must take place in accordance with the law of cause and effect. From this point of view Kant combats the empirical derivation of the idea of cause. It has indeed been already sufficiently proved that the idea cannot arise from sense or intuition, because it is one of the forms of thought; and if the independent existence of the thinking faculty be admitted, together with the accordance of this idea with the form of the hypothetical judgment, its sensible origin is excluded without entering upon any inquiry as to its universality and necessity.[1] But Kant considers specially the derivation of Hume. When you derive the idea of cause, he asks, from your experience of uniform antecedence, what antecedence do you mean? Is it mere antecedence in your perception? Then not only are there uniformities in which the antecedent is not a cause, but there are also instances in which the cause is not the invariable antecedent—in which, in fact, the effect is first perceived. But do you mean antecedence in the states of empirical objects?

[1] A similar remark is applicable to Substance. Dean Mansel seems to have strangely overlooked this part of Kant's System in his Prolegomena Logica, cap. v. To derive the *forms* of thought from intuition would be to subvert the whole Critical Philosophy.

Then it is impossible for you even to think of this antecedence without employing the idea of causation. It is just this idea of causality that separates reality from imagination, and enables you to represent real objective succession at all. The School of Hume have indeed nearly reached this point. Their permanent possibility of sensations is not a mere passive possibility; it is a potentiality—a cause of sensations. But to derive the notion of causality from the uniform sequences which may be observed among *causes* of sensations, is manifestly absurd. The empiricist must, therefore, derive it from uniform sequences, not among causes of sensations, but among sensations themselves; and here the objections of Kant appear unanswerable. It seems also to be pretty generally admitted that our notion of a reality differs from that of a mere creature of the imagination chiefly in this, that we attribute action—causality—to the former. If this be conceded Kant's test of real change as opposed to mere succession in conciousness (or apprehension) can hardly be disputed. The man I see in my dream is often as vivid in perception as a real man; but when I examine all the empirical objects around me in the morning I find no trace of his causality. All remains unchanged. The man was therefore unreal. He was not an object of experience: for Kant, as has been already observed, distinguishes Experience both from Sensation and Imagination. The Cate-

gories and Principles are not needed for either of the latter, but without them there could be no Experience.[1]

The time occupied by the cause, and by the effect according to Kant, may be *immediately* successive—no interval, however brief, intervening between them. To use his own expression, "we must attend to the *order* of time and not the *lapse* thereof. This order remains even though no time has elapsed" (*Critick*, 151). It would thus seem as if changes might be ab-

[1] Kant's summary of the proof of the Principle of Causality is as follows:—"To all empirical cognition belongs the synthesis of the manifold by the imagination. This synthesis is always successive; but the order of succession in imagination is not determined, and the series of successive representations may be taken retrogressively as well as progressively. But if this synthesis is a synthesis of apprehension" (i. e. of experience), "then the order is determined in the object, or, to speak more accurately, *there is therein an order of successive synthesis which determines an object*, according to which something necessarily antecedes, and when this is posited something else necessarily follows. If, therefore, my perception is to contain the cognition of an event, that is of something that really happens, it presupposes another phænomenon on which this event follows necessarily, that is in conformity with a rule:" otherwise he proceeds to say, "I must look upon it as a mere dream." (*Critick*, 149, 150). In this passage, too, Kant explicitly identifies phænomena with "*possible* perceptions" which he has hardly done elsewhere; but if they are understood as *actual* perceptions only, the Critical Philosophy will at all events be incumbered with serious difficulties.

solutely instantaneous, an indivisible instant separating the existence of the thing in one state from its existence in the other: for Kant does not say that the interval between the action of the cause and the arising of the effect may be too short to be estimated by our faculties, but that there may be no such interval at all—that it "may entirely vanish." Indeed "at the moment when the effect first arises it is always simultaneous with the causality of its cause, because if the cause had but a moment before ceased to be, the effect could not have arisen," (*Critick*, 151). But nevertheless Kant is of opinion that we can prove *a priori* that all change is continuous. His proof (which is hardly given with his usual clearness), appears to be as follows: The cause being a phænomenon, its action must be phænomenal also, and this phænomenal action must occupy a certain length of time. Though the effect arises simultaneously with the action of this cause, still this action itself is not instantaneous, but is spread over a certain length of time. Now the time in which the cause acts is infinitely divisible, and by subdividing it we can subdivide the action of the cause, and consequently the arising of the effect. Thus if I give a blow to a cricket ball which causes it to start from a state of rest into motion at the rate of ten miles an hour, the ball begins to move at the very instant that it receives the first shock. But the impulse itself lasts a certain time—

say the tenth part of a second. If I subdivide this tenth of a second into thousands, then if I could arrest the blow at the end of the first ten-thousandth part, the ball would not start off at the rate of ten miles an hour, but (supposing the accession of velocity uniform) at the rate of one hundredth part of a mile an hour; and in fact this *is* the velocity with which the ball is actually moving at the expiration of the first ten-thousandth part of a second. If I again divide these ten-thousandths of a second into hundredths or thousandths I reach a moment when, if the impulse ceased, the ball would move off still more slowly, and when, in fact, the ball *is* moving more slowly. Thus in changing from rest to motion with a velocity of ten miles an hour, though the whole change may have been effected in the tenth part of a second, the ball has actually been moving with every intermediate velocity at some instant during the interval. If we could assume that every change occupied a certain time we might have drawn the same inference from the infinite divisibility of time without any reference to the action of the cause: and Kant sometimes speaks as if the principle could be proved in this way. I think, however, that a comparison of *Critick*, 154, and *Critick*, 129, will satisfy the reader that he does not think the principle can be completely established without referring to the action (or causality) of the cause. It is, however, closely connected with the Anticipations

of Perception by which every sensation is shown to be capable of rising through imperceptible (or continuous) gradations from zero up to any given degree of intensity. This law, it will be noticed, is only applicable to *change*. In a sheet of paper, half black and half white, there is no continuous transition—no intermediate line which is of an intermediate colour. But in such a case there is no change. The two distinct colours are simultaneously present in space, and do not succeed one another at all. They may, of course, succeed one another in my apprehension; for if I am passing my eye upwards I first see the lower half, and then the upper; and if I am passing my eye downwards the reverse is true. But they do not succeed one another in the object. Consequently there is no change, and therefore there need not be any continuity.

22. The third Analogy of Experience is, that all coexisting substances are in a state of mutual action and reaction. Here we must not mistake the import of Kant's Category of Reciprocal Action, Community or Reciprocity. When heat produces motion, and this motion reproduces heat, we might be ready to say, here is a case of Reciprocal Action, or Reciprocal Causation: or again, when oxygen and hydrogen produce water, and water reproduces oxygen and hydrogen. But there is no mutual action in such instances. The heat does not *act* on the motion, for it ceases as soon as the motion is produced, and

for the same reason the motion does not act either on the antecedent or the consequent heat. The one exists only before it, and the other only after it. In our other example the water does not act on the oxygen or hydrogen, or *vice versâ*, because they are in fact the same thing in two different states, and two different states which cannot exist together. For mutual action it is essential that the thing which acts and the thing which is acted upon should be distinct, and should exist simultaneously. It is, as Kant says, a reciprocal causality of substances with respect to their accidents (*Critick*, 111); and as substances exist in all time, the active substance and the passive (or rather reacting) substance must both exist through all time, and therefore throughout the time of their mutual action; which mutual action indeed takes place throughout all times likewise, though its particular character may vary. I have here excluded a false interpretation of Kant by showing that Reciprocity would, according to it, be a law of succession not of coexistence; but the reader must not infer that coexistence must be presupposed before we can assume reciprocity. On the contrary the Analogy before us asserts that Coexistence—real objective coexistence—is cogitable to us only by means of the Category of Reciprocity. Indeed, as without a permanent substance in time we should not regard all times as forming parts of *one* vast time, so without this mutual action of all objects in

space we should not regard all spaces as forming parts of *one* vast space. Moreover it is just as impossible to fix by mere perception the position of an object in absolute space, as it is to fix its position in absolute time. If the whole visible universe was moving uniformly in space at the rate of a million of miles a second we could not detect so much as the existence of this motion. It is only in relation to some bodies that we can fix the positions or motions of others. But Kant adds that if these bodies were separated by empty spaces, it would be equally impossible to fix their positions with regard to each other in space; for the empty space which separated them could not be perceived, and would break the chain of perception in passing from one to the other. Starting from either body I should come to a stop when I reached the boundary of the empty space, and I could not so much as conjecture what thickness of empty space separated the one from the other. I could not even tell what direction one of these bodies lay in from the other; for a part of the joining line would run through empty space, and though another part of it might be perceptible I could not ascertain that in moving along this part I was moving towards the other body—a body which during this motion would be imperceptible. Moreover, in this reasoning I am supposing that all space is known to be one which, in fact, is only ascertained to be the case by observing

that we can pass from any part of it to any other part by a continuous series of perceptions. Now, without this unity of space unity of experience would be impossible, and the tests by which we distinguish between dreaming and reality would fail us. All space, therefore, so far as it is an object of possible experience, is full of matter. Each portion of this matter occupies its own position and excludes all other portions therefrom. Bodies limiting each other, in contact with each other, and excluding each other, are to be found everywhere; and moreover they must all act (or be capable of acting) on one body, namely, our sensitive organism, since if this was not the case the space occupied by them would be for us empty. It is not indeed necessary that every body should *directly* act upon every other body. Intermediate bodies acting on both, and acted on by both, suffice to keep up the general circulation of the system; and in this mutual action the great agent, as Kant suggests, is probably Light. Nor do I think Kant would limit this mutual action to mere contact limitation and exclusion. He clearly intimates that the position of every body in space is the consequence of the actions which are going on between it and all other bodies—the result of the various attractions and repulsions of other bodies to which it is exposed both in the past and the present. It is in fact a position determined by a system of forces whose ramifications extend to the limits

of possible experience. Kant's Principles of Pure Physics are no mere verbal trivialities but fundamental laws of the sensible universe.

So far, however, we have spoken of co-existence in space rather than in time; but in fact the two run into one. All perception according to Kant takes place successively, but we have seen under the last head that it does not always involve an objective succession in the perceived phænomena. This only occurs when there is a necessary succession—a fixed order of successive syntheses—from which we cannot depart. It might seem as if in all other cases the phænomena were objectively co-existent; and perhaps it would be so if we were assured *a priori* that they *were* all phænomena—empirical objects. But the objects perceived may be mere products of imagination. Sense and imagination are not discriminated intuitively, nor is there any instantaneous and universal test applicable to the distinction. To judge that phænomena are objectively co-existent we must know something more of them than that they are not objectively successive; and as this something more is not contained in mere perception, we must derive it from thought—from a Category. If an (apparent) phænomenon acts it is an empirical object, and not a mere creature of imagination; and so if two (apparent) phænomena act upon each other they are objectively co-existent, not subjectively successive. As in the one case

there was a definite order of successive synthesis, which compelled us to bring the manifold of the perception under the Category of cause and effect, so here there is more than one order, but still the possible orders are limited to a definite number. I cannot put the manifold together in any other orders than these, and I would regard the percept as purely imaginary if I could do so. I must proceed either from A (through B, C, D) to E, or from E (through D, C, B) to A (*Critick*, 157). In apprehending a house I can begin at the roof, and proceed gradually down to the foundation, or *vice versâ;* but if I first saw the roof, then the foundation, and the middle of the building last of all, no apprehension of a house would arise, and I should conclude that my imagination only had been at work. This would be still more evident if in making two successive apprehensions under the same conditions I found that the order had varied. Co-existence in time, then—that is *objective* co-existence in time—requires not perception, but a Category; and this Category is that of Community, or Reciprocal Action. It is only by representing two empirical objects as (directly or indirectly) acting upon each other that I can represent them as existing at the same moment of time.

These, then, are the three analogies of experience. It is in consequence of them that all our experiences form parts of one vast experience in

which we can proceed from any point to any other point by a continuous and unbroken chain. We have first a number of empirical objects existing throughout all time, and thus connecting its remotest parts together; then each of these objects acting directly or indirectly on every other, and thus connecting all space into one vast universe; and thirdly, every change in any of these objects determined by a preceding state of some other object, which thus again enables us to traverse the great field of experience in every direction by following this clue of cause and effect. The reader will easily see the advantage which the Kantian theory here possesses over the Association System as regards completeness of explanation. The Associationist postulates uniformities of succession and co-existence in our sensations in order to account for the associations which generate the principles of causality and substance. Kant endeavours to show how from the very nature of the mind these uniformities of succession and co-existence must present themselves to us. It is not for me to consider the general question at issue between the two schools; I would only say that the uniformities of succession and co-existence which our sensations exhibit ought not to be postulated as ultimate until every attempt to explain them by means of mental laws had proved unsatisfactory.

23. The Postulates of Empirical Thought need not long delay us. The first is that *The formal con-*

ditions of experience must be assumed as possible. Thus I could not prove from my notion of a substance that such a thing is possible any more than I could make a similar inference from my notion of a centaur; but as all experience presupposes permanent substances, I must postulate their possibility in behalf of experience. So of cause. Starting from the mere notion, I could not cognise the possibility of a thing from which something else necessarily follows, nor have I any right to say that there might not be a world in which no such thing existed. But as I could have no experience (as distinct from sensation and imagination) without causation, the possibility of a cause is a necessary postulate for all empirical knowledge. A similar remark will apply to the other Categories. I must assume that something corresponding to all of them is possible before I can take a single step in the field of experience.[1] The second Postulate is, *That which coheres with the material conditions of experience* (*is real or*) *exists.* This coherence and existence may of course be proved by actual perception; but even when I do not actually perceive the object, I may infer its existence if it is related to some actual percept through one of the Analogies of Experience—usually through

[1] This seems to me the most natural meaning of the First Postulate; but I have considerable doubts of the correctness of the above exposition. Kant can hardly mean that everything is possible which we can represent as existing in time.

the principle of Causality. Thus I may infer (though I cannot perceive it) the existence of a magnetic matter in the earth from observing its effects upon the compass needle. And as the first Postulate is (apart from actual experience) our *only* test of Possibility, so the second is our *only* test of Reality. That which is neither an actual percept nor necessarily related to an actual percept can never be proved to exist. The third Postulate is thus stated by Kant: "*That whose coherence with the real (existent) is determined according to the universal conditions of experience is necessary.*" There is, however, but one instance of such determination—namely, the sequence of an effect from a cause. Hence, as Kant says, the law of Necessity coincides with that of Causality. These postulates, I apprehend, must be regarded as *exclusive* conditions of Possibility, Existence, and Necessity in experience. Nothing is to be assumed as Possible unless it is either given as real or presupposed by the formal conditions of experience. Nothing is Existent unless it occupies a definite time; nothing is Necessary except the effects of given causes. These are our notions of Possibility, Existence, and Necessity, as employed in experience, and beyond the limits of experience Possibility, Existence, and Necessity are empty forms of concepts to which we can obtain no object to correspond. There may be possible existent or necessary objects outside our experience, or there

may not. It is a point on which we are perfectly incompetent to judge. We can only apply these Categories by means of their schemata, and the schema of every Category limits it to experience. It is only of possible experience that we can determine anything *a priori*. All beyond that sphere is simply a blank. All *a priori* principles, indeed, might have been called Anticipations of Perception (*Critick*, 127).

24. In connexion with the last two classes of Principles Kant enters pretty fully into the difference between experience and imagination. Imagination in so far as it is passive is sense. A fragment of our experience taken alone is not discriminated by any decisive mark from a mere dream. If Adam dreamt on the first night that he spent on earth his dream was as real as his waking experience of the previous day; but when he awoke on the second morning everything accorded with the previous day's experience and not with the dream. If on falling asleep the second night he returned to the world of his first night's dream, a discrimination would still have been needed, and he would have remained in doubt as to which world he was really an inhabitant of. Reality then differs from imagination or dreaming, not in itself, but in its connexion with other perceptions. All experience is so joined together that I can pass in an unbroken line from any part of it to any other part; but this is not

so with the mere play of imagination. This universal connexion of everything with everything is then the distinctive characteristic of experience—a point of view from which the reader can understand Kant's assertion that the three Analogies (for instance) are conditions of all experience, conditions without which experience would be impossible. It may be true, indeed, that in one sense the man I saw last night in my dream belongs to my experience; but then he belongs to it not as a man but as a representation. If he belonged to it as a man, I should find him to-day under conditions consistent with last night's perception, which is not the case. Hence Kant rejects Idealism, that is the doctrine that we have in reality no External Sense, but that the phænomena of the Internal Sense sometimes present an apparent and illusory externality. Not only am I as directly conscious, says he, of external phænomena in space as I am of internal phænomena in time, but I find the former subject to the same rules of universal connexion as the latter. My external experience is as firmly knit together by the universal principles which have just been expounded as my internal experience is—therefore the former is experience not imagination. I may indeed through the spontaneous energy of thought (*I think*) possess stronger evidence of an internal than of an external noumenon: but external phænomena rest on quite as solid a footing as internal phænomena. It

is as certain that there are bodies in space as that I myself exist *in time*. Nay, if anything, there is stronger evidence for the existence of the former. For from the first Analogy of Experience it appears that for all experience we must presuppose something permanent in perception. But there is no such permanent in the internal sense; therefore the permanent must be found in the external sense—in the unchangeable impenetrability of material substance. It might be replied that the Ego (or *I Think*), which accompanies all acts of consciousness, is a permanent in the internal sense. But this *I Think* is, according to Kant, not a passive sensation but an act of thought. It does not, therefore, belong to intuition or fall under its forms. It is not a perception, and therefore it is not a permanent perception. Strictly speaking, it is an act of Pure Thought (independent of time) in which the Ego is not phænomenized; though, as it contains no determination of this Ego, it does not enable me to cognise myself as a Noumenon. For to know my Ego I must know it in some particular state, and such a particular state is only given by means of the internal sense, which presents me with nothing but time-states, and therefore only with myself as a phænomenon. And in this internal sense nothing is permanent. The permanent phænomenon, therefore, which all experience requires must be a thing in space—an object of external sensation. Whether the Thing in itself—the

Noumenon—which lies at the basis of this thing in space is a mind or a thing quite distinct from any mind is a point on which we cannot decide. But so far as Idealism seeks to reduce the two kinds of phænomena (internal and external) to a single head (internal) it can be refuted by an appeal to the fundamental conditions of experience.[1]

25. Such is a summary of the results of the Transcendental Analytic, for we need not concern ourselves with the criticism of Leibnitz with which it concludes. The doctrine of the Schematism forms the key to the whole of its elaborate superstructure. The Categories are mere empty forms unless we can obtain objects to subsume under them; but this can only be done by means of the Schemata, which, in realising the Categories, at the same time restrict

[1] Philosophers usually attempt to prove the existence of the external world by means of the Principle of Causality. My sensations, it is said, must have causes, and as I myself am not the cause there must be an external world which causes them. Kant points out the fallacy of this reasoning. My sensations have a cause, no doubt, but what is to prevent that cause being another mind—a Divine mind—as Berkeley held? The Principle of Causality, therefore, throws no light on the question at issue between the Realist and the Idealist. If we would oppose Berkeley, we must either maintain with Sir W. Hamilton that the real external world is directly perceived (not inferred as a cause), or else confine ourselves, like Kant, to proving that *as objects of experience* mind and matter are different, and that the one is as truly an object of experience as the other.

their application to objects of possible experience. The Categories without Schemata are perfectly indeterminate. There is nothing in the conception of a subject (as opposed to a predicate) to give me the slightest clue to what kind of thing I should employ as the subject of my judgments; and even if I met with such a subject I should fail to recognise it. The clue to the application of this Category is afforded by the Schema of Permanence. It is the same with the other Categories. But not only would it be impossible to employ the Categories without Schemata, but it would likewise be impossible to form a synthetical proposition about them; for the synthetical element in the Principles which we have just been considering is always introduced by the Schema. If we attempted to prove that *In everything there is substance* we should utterly fail. We have succeeded in proving that *In all phænomena there is substance* only because without a permanent phænomenon experience would be impossible; but this reason would fail us if we attempted to surpass the limits of experience, and we should have no other to supply its place. *Everything that is contingent has a cause*, is a proposition which has sometimes been put forward as a synthetical truth extending beyond the limits of experience. But what, asks Kant, do you mean by the contingent? Do you mean that whose non-existence is conceivable? If so, how is the proposition to be proved? Or do

you mean that which exists as a consequence of something else? If so the proposition that The contingent has a cause is merely analytical. From pure Categories, as Kant says, no synthetical judgment can be made; it is only when we take in the Schema that such a judgment becomes possible. The synthetical judgments of Pure Physics are, in fact, judgments in which the Categories are applied *by means of their Schemata* to objects of sense; and the only way to prove the truth of these judgments is to show that all experience—all empirical knowledge—involves a Category thus applied, and hence that without the combined Category and Schema experience would be impossible. If there are any conditions without which experience would be impossible these conditions must hold universally *in* experience; but to prove that they hold good *beyond* experience is a very different task, and, according to Kant, a hopeless one. *A priori* knowledge is so called in reference to its origin not its objects; for all objects of human cognition are empirical. *A priori* truths are merely anticipations of how these empirical objects will appear to us. For it is evident that phænomena or empirical objects do not wholly depend on Things independent of the mind. The mind itself also contributes to the cognition of them; and if you had a thorough insight into the nature of my mind when I was about to feel my first sensation, you would be able to predict a good deal about my future expe-

rience, though you were wholly ignorant of what Objects were about to affect me. Kant believes that in his Æsthetic and Analytic he has given a complete enumeration of all that could be predicted under these circumstances. You could predict that I would place all material phænomena in space, and all states of my own mind in time; that these objects in space and time would be subject to the laws of Geometry and Arithmetic; and that, in so far as they belonged to experience rather than imagination, they would also be subject to the Principles of Pure Physics as set forth in the Analytic. But though *you* could predict all this, of course *I* would not be aware of it. *A priori* truths do not mean truths which are known *previous* to experience. The only way that we could come to know them is by analysing our experience and endeavouring to ascertain what elements in it are attributable to the nature of our own minds, and what to the unknown Something that affects us. The main difference between Kant and the Association School on this point is that Kant attributes the uniformities of succession and coexistence which my sensations exhibit to my mind, and not to anything independent of it; while the latter believe that most of the necessities of thought of which I am conscious, result from the operation of the Law of Association on certain ultimate and inexplicable uniformities.

The following tabular sketch of the results of the Analytic may be found useful :—

Form of Judgment.	Pure Category.	Schema.	Principle.
Quantity.	*Quantity.*		
Universal Particular. Singular.	Totality. Plurality. Unity.	*Number or series in time.*	*Axioms of Intuition.*
Quality.	*Quality.*		
Affirmative. Negative. Infinite.	Reality. Negation. Limitation.	*Filling up of time (with sensation).*	*Anticipations of Perception.*
Relation.	*Relation.*	*Order in Time.*	*Analogies of Experience.*
Categorical. Hypothetical. Disjunctive.	Substance—Accident. Cause—Effect. Community.	Permanence. Succession. Co-existence.	Principle of Subsistence. Principle of Causality. Principle of Mutual Action.
Modality.	*Modality.*	*Occupation of Time.*	*Postulates of empirical Thought.*
Problematical. Assertorial. Apodictical.	Possibility. Existence. Necessity.	Occ. of any time. Occ. of a definite time. Occ. of all time.	First Postulate. Second Postulate. Third Postulate.

26. Kant has also a two-fold division of the Categories and corresponding Principles, viz., into Mathematical and Dynamical. The Categories of the first kind (Quantity and Quality) have no correlatives : those of the second kind have (hence, strictly speaking, our table of Categories of Modality should have been written Possibility—Impossibility, Existence — Non-existence, Necessity—Contingency). This arises from the fact that the synthesis expressed by the former is a combination (of the homogeneous), and that expressed by the latter a *nexus* (of the heterogeneous). The Mathematical Principles give us information as to how the phænomenon

is constituted (whence Kant sometimes calls them Constitutive Principles); the Dynamical only tell us in what part of time to seek for them, e. g. that the cause must be sought for in the time preceding the arising of the effect (whence Kant calls them Regulative Principles). Dynamical in Kant's phraseology signifies relating to (or determinative of) Existence: and it is because these Categories and Principles do not tell us any of the properties of the thing, but only how (in what part of time) it exists, that he calls them Dynamical. The Mathematical Principles, on the other hand, assert properties of the object (i. e. that it has both an extensive and an intensive quantity), but decide nothing as to the part of time or space in which it exists. They are called Mathematical Principles, as has been already observed, because they justify the application of Mathematics *to objects of experience;* the Principles of Mathematics, properly so called, having been previously explained in the Æsthetic. These Mathematical principles are immediately certain, while the certainty of the Dynamical Principles, though complete, is not immediate. The necessity of introducing the Schemata is more evident in the case of the latter. In Quantity and Quality the parts which we add must be homogeneous with (similar to) those with which we set out. A line added to an angle, or to a sphere, does not make up a quantity, nor does a portion of time added to a portion of space. Again, if we add a sensation of sound of a

certain degree of intensity to a sensation of smell of a certain degree of intensity they do not make up a single sensation of greater intensity. We must then add similar parts together to produce either a quantity or a degree. Hence it is evident that if we start from a phænomenon or object of possible experience the very nature of the process will keep us from transcending (or overpassing) the limits of possible experience. But it is not so in the Dynamical Categories and Principles. It is not necessary that the cause should be homogeneous with the effect, and in fact it is commonly believed that certain phænomena are produced (caused) by Noumena or Things in themselves. Here then we must bear in mind that we have only been able to prove these Principles as conditions of possible experience, and are not justified in extending them beyond experience: that their synthetical character, in fact, results from combining the pure Category with its Schema, and that without the latter (which limits its employment to possible experience), the Category is wholly inapplicable. Hence Kant draws out in detail the Schemata of each of the subordinate Categories of Relation and Modality, and likewise the three subordinate Principles under each head. This he seems to have considered unnecessary in the case of Quantity and Quality, where there was little danger of transgressing the limits of experience: but in Relation and Modality where the risk is considerable

it became necessary to trace out the Schemata and their consequences at full length (*Critick*, 136).

27. The analysis of the *a priori* elements of Reason—the faculty of inferring or syllogising—follows. This forms the last great portion of the *Critick* (for the Methodology, which I do not notice in this Essay, is, in fact, an independent treatise on the Method of Philosophy, the results of which, however, in many respects confirm those of the *Critick*)—the Transcendental Dialectic; and it is from its results that Kant derives his answer to the question, How is pure Metaphysics (Ontology) possible? It is, however, by no means as highly-finished a work as the Analytic. The perfect method of the former is often lost amid the digressions of the Dialectic; the last Antinomy is, I think, founded upon an entirely irregular principle, and the leading clue of the Categories is left wholly unapplied in the case of the Theological Ideal. It is somewhat singular that we find so much want of method in the only part of the work which directly carries out the original design. But the truth is that its results have been already anticipated. No reader who had been convinced of the truth of the Æsthetic and Analytic could continue to believe in the possibility of a speculative cognition of things *per se*.

Kant accepts the Syllogistic theory as a complete analysis of all right reasoning, and as therefore affording a basis for a determination of the *a priori*

elements in the process. He recognises three kinds of Syllogism—Categorical, Hypothetical, and Disjunctive. Indeed, if the Categorical, Hypothetical, and Disjunctive judgments are regarded as really distinct and irreducible, it is plain that we must extend the same conclusion to the corresponding Syllogisms. Categorical Syllogisms he treats as all reducible to the first figure, the major premiss of which he denotes (like Bacon) by the word Principle; though, as he remarks, it ought not to be absolutely so called unless it cannot itself be deduced from another Principle, by means of what is called a Prosyllogism. Reason I have spoken of as the faculty of inferring or concluding; but it has another office, which Kant considers even more essential, and which is now generally designated *Explanation*. To explain is to derive one part of our knowledge from another by means of a syllogism. Thus Kepler's laws were explained when they were deductively inferred from the Newtonian theory of gravitation. These laws then ceased to be regarded as ultimate premisses of our knowledge. Nor was it possible any longer to regard them as possessing unconditional truth. They were only true on condition that Newton's laws were so. They could not be regarded as Principles. The conclusion of any syllogism is only shown to be true if the premisses are true. The premisses are thus conditions of the conclusion; and if these pre-

misses themselves are not unconditionally true the conditions of *their* truth will likewise be conditions of the truth of the conclusion; and so on through the series of regressive conditions to whatever distance it goes back. I cannot assume the truth of a conclusion without assuming the truth of *all* the premisses which are required to arrive at it.

The office of Reason in this department of Explanation or Prosyllogising is to give the greatest possible unity and system to the cognitions of the Understanding—to derive all our knowledge from the smallest possible number of original principles or premisses. Starting from any conditional or derivative truth, "it wishes," as Kant says, "to attain completeness in the series of premisses so as to render it unnecessary to presuppose others" (*Critick*, 261). It seeks, therefore, not merely for the conditions of a given conditional truth, but for the *totality* of these conditions, since so long as the series of conditions is not complete its task is still unfinished, and it must go on to seek the remaining conditions before it can attain to the highest degree of unity and system. Thus Reason seeks for a Totality of the conditions complete in every respect, or as Kant calls it, an ABSOLUTE[1] *Totality of the*

[1] This meaning of Absolute does exactly coincide with Hamilton's meaning, which I have adopted for brevity in the case of the Antinomies.

Conditions of a given derivative truth. When this has been attained Explanation can be carried no further, and we have obtained the ultimate principle or principles on which our conditioned truth depends. But, as Kant observes, the Absolute Totality of the conditions must always be itself Unconditioned; for if *it* had any conditions it is evident that these would be also conditions of the conclusion which we are seeking to explain, and that therefore those previously enumerated could not amount to an Absolute Totality of the Conditions. Hence we obtain another expression for that which Reason seeks in its office of Explanation. We may say either that it seeks the Absolute Totality of the Conditions or that it seeks *the Unconditioned* which completes the series of conditions; since the series can never be absolutely complete without an Unconditioned. And as Reason in its Logical Use pursues the conditions of a derivative truth until it attains to completeness in the series of premisses, we may naturally expect that when applied to objects instead of propositions the faculty will pursue a similar course. Indeed, the two processes are very often identical. Whenever, therefore, an object is presented to me *as conditioned*, my Reason naturally inquires for the conditions of this object, and does not rest satisfied till it has obtained completeness in the series of these conditions, which completeness again is possible only through

an Unconditioned. The conditioned object could not exist if any one of the conditions on which its existence—immediately or remotely—depended was wanting. If it exists therefore all its conditions must exist or have existed; and Reason, which aims at unifying or systematising our knowledge, compels us to seek these conditions, and not to rest satisfied so long as a single one of them remains undiscovered. Its peculiar office here also is then to seek for the Absolute Totality of the Conditions, or for the Unconditioned.

28. But if we could attain to the ultimate and unconditioned premisses from which all else that we know would follow deductively, what would these premisses be? Plainly, judgments or propositions; for by prosyllogising we could never reach anything else. Now the forms or *a priori* elements of these judgments or propositions have been already determined; in fact they are the Categories. Reason, then, seems only to have led us back to the same *a priori* forms as before. But there is this material difference. Our premisses have now been elevated to the Unconditioned, and consequently their forms have become Unconditioned also. Instead of Substance and Cause, for example, we have now Unconditioned Substance and Unconditioned Cause. If we try the same process on conditioned objects we arrive at the same result. Every object of experience contains a Category. An Unconditioned

object must then contain an Unconditioned Category. The Reason thus seeks for Unconditioned Categories, and as it must know what it is seeking for, it originates the notion of an Unconditioned Category. This Unconditioned Category Kant calls an *Idea*. I have occasionally used this word before in the ordinary sense, which the reader must not confound with the Kantian.

There will then be as many Ideas as there are Categories, since each Idea is a Category elevated to the Unconditioned. The Reason, in fact, intellectualises the Categories, as the Judgment sensualised them by means of the Schemata. We might, then, expect to find four Ideas of the Pure Reason, each divided into three heads, following the table of Categories and Schemata. But this is not the case. The great division of Syllogisms is into Categorical, Hypothical, and Disjunctive, the divisions of them as regards Quantity, Quality, and Modality being entirely subordinate. We have then three Ideas of the Reason, corresponding primarily to the three Kinds of Syllogism, or to the three Categories of Relation. The Soul or Ego appears to be the subject in all my judgments, and therefore corresponds to the Idea of Unconditioned Substance. The law of Causation being the great link of connexion in the Universe, the main office of Reason will here be to seek for the Absolute Totality of the series of Causes, which we have seen involves the Idea of an

Unconditioned Cause. The first two Ideas therefore answering to the Categorical and Hypothetical Syllogisms are those of the Soul and the Universe. The third, corresponding to the Disjunctive Syllogism, is, according to Kant, the Idea of God. This Idea is that of the Sum of all Reality, or Sum Total of All Positive Predicates[1]—a definition which Kant adopts from his Ontological predecessors. That such an Idea would appear in an ultimate disjunctive major premiss may perhaps be thus rendered evident. If my disjunctive major was, A is either *a* or *b*, or *c*, &c., or *m* (with suppose the minor, But it is not *m*), and if there was any possible class of beings (say *n*) not enumerated in this list (*a* or *b*, or *c*, &c.), then I might proceed to a higher syllogism, viz., A is either *a* or *b*, or *c*, &c., or *m or n*, and from this and the minor premiss, But it is not *n*, I could deduce the above major, which would therefore not be ultimate: neither of course would it be unconditioned, for it would only be true on condition that A was not *n*. The ultimate major

[1] Not of course the Sum-Total of All Positive *and Negative* Attributes, which would be self-contradictory (*Critick*, 354). The late Dean Mansel and others contend that this Idea of a Sum-Total of all Positive Predicates *ultimately* resolved itself into contradictions; but this is a very different thing from including negative attributes, and thus arriving at contradiction immediately. Mr. Mill would have done well to have considered these controversies on the Absolute and Infinite historically not lexicologically.

should therefore contain an enumeration of all distinct classes of real beings—that is, in fact, of all possible positive predicates. Kant makes use of a somewhat different argument, which will be noticed, when we come to consider the Idea of God, specially. At present it is enough to say that the three Categories of Relation raised to the Unconditioned by the Reason (the prosyllogising faculty) afford us the three *Ideas* of *the Soul*, *the Universe*, and *the Deity*. Kant otherwise speaks of these Ideas as *God*, *Freedom*, and *Immortality*: for the possibility of Free Causation is the main problem to be solved under Rational Cosmology, and the Immortality of the Soul is the chief question of Rational Psychology.

29. But how are these three Ideas related to the *other* Categories—those of Quantity, Quality, and Modality? For completeness of system it would seem as if one Category under each head (elevated to the Unconditioned) should be appropriated to each Idea, and that thus the three Ideas would be ranged under four heads, differing only in arrangement from the table of Categories. Kant adopts this course in the case of the Psychological Idea—the Soul—though more distinctly in the first edition than in the second; and in the case of the Cosmological Idea—the Universe—he likewise brings the four Antinomies under the four heads of Quantity, Quality, Relation, and Modality, though from the

very fact of their Antinomial character it seems difficult in some cases to say which Category under each head is thus employed. Any doubt which existed on this point might, however, have been cleared up when treating of the Theological Idea or God. But here Kant unexpectedly abandons the topic of the Categories altogether, and except that the derivation of the Idea from the Disjunctive Judgment indicates Unconditioned Community as the main element in the Idea, we are left totally at a loss as to how the system should here be carried out. I venture to suggest as the most probable mode of completion, that the Soul answers to the first of the Categories under each of the four heads when elevated to the Unconditioned, the Universe answering to the second, and the Deity to the third; which last, it will be recollected, is in each case a synthesis of the other two. But I cannot support this theory by distinct quotations from Kant. Indeed as regards the Soul it is clear that he refers it to the Category of Existence which stands second in the list of Categories of Modality. I may here observe that no charge against Kant is less worthy of regard than that of introducing Logical forms into everything. His theory of cognition is an attempt to explain all knowledge by means of the passive manifold received from sense, and the operations of the discursive faculty of which Aristotle's Logic is accepted as a complete analysis. Kant is therefore

bound by his theory to introduce Logical forms into all cognitions, and it would be a very serious objection to the doctrines of the *Critick* if he had failed to do so. It is therefore to be regretted that he has not carried out the application more definitely in the Dialectic so as to enable the reader to form a better judgment with respect to the working of the system in this department.

30. The first Idea of Pure Reason then is Unconditioned Substance, which the Metaphysician professes to find in Mind. All states of consciousness have this in common, that they are *mine*. Some philosophers, indeed, have denied this, and asserted that in the first state or states of consciousness there is no Ego. Such theorists I apprehend confound Personality with Identity of Person or Permanence, which two last perceptions would of course require a succession of mental states before they could be recognised; but I need here only remark that this Ego, or *I Think*, is an essential element in every state of consciousness according to Kant. The phrase *I Think* best expresses its nature according to our author: for it is not an intuition but a thought (combining the manifold of sense by means of this common property of referring to an Ego), and the I or Ego involved in it is merely = that which thinks.[1]

[1] Accordingly Kant designates this "I, or He, or It, who or which thinks," by the algebraic symbol of an unknown quantity, x. *Critick*, 230.

This *I Think* is an *a priori* representation, and a condition of the possibility of all experience; indeed we have seen already that the Categories are its subordinate forms. No objection, therefore, can be made against founding a Rational or *a priori* science upon it if it can be done; but in fact it is a mere thought without intuition, and as we can only obtain an intuition of this Ego through the internal sense our cognition of it is always empirical. *I Think* is the expression of a synthetic *act* not of a determinate *object*. But this I or Ego which thinks is always the subject of thought, and not the predicate. It thus seems to correspond to the definition of Absolute or Unconditioned Substance (in the sense of the Pure Category), viz., that which can only be subject and not predicate; and this accordingly is the starting point of Rational Psychology. But Rational Psychology aims at determining what is the nature of all souls (or minds), and does not limit itself to the individual Ego with whom it deals at the moment. It therefore starts not with the actual judgment or representation *I Think*, but with the general concept or notion of a *Thinker*, or rather (if I may coin a phrase), an *I-Thinker*, viz., a being all whose thought or consciousness necessarily takes the form *I* Think. If there could be thought without an Ego, Rational Psychology has nothing to say of the subject of this kind of thought: but it seeks to determine *a priori* the nature and properties of the subject of *I-Thought*.

Starting then from the concept or Idea of an *I*, or thinker it concludes that since the Ego or I appears only in the character of subject (thought being predicated of it in the judgment I Think) it is substance; since this notion or Idea *I* is not resolvable into parts, it is simple substance; since the representation *I* is always the same it is identical substance, and since this representation contains in it no reference or relation to anything else (for instance matter), it is independent substance—its existence is not conditioned by anything else. These four inferences Kant calls the Paralogisms of Psychology, and they correspond to the four kinds of Categories—Quantity, Quality, Relation, and Modality (raised of course to the Unconditioned). We start with Unconditioned Substance; then simplicity corresponds to Unconditioned Reality (which, perhaps, will appear if we consider that the reality of a composite whole necessarily depends upon, or is conditioned by, the reality of each of its parts); identity implies Unconditioned Unity, and the fourth Paralogism asserts Unconditioned Existence. It might here perhaps be argued that the Idea involved in fourth Paralogism was that of Unconditioned Possibility, or the Possibility of Mind existing independently of anything else; for we have started from the concept of a Thinker in general, and can hardly seek to conclude that everything that can be cogitated under that concept exists—a conclusion which

would involve the real existence of the heroes and heroines of our novels. The true inference would seem to be that Mind does not stand in need of matter for its existence. The Paralogism as stated by Kant, however, takes a somewhat different form, and argues that I am certain of my own existence *but uncertain of the existence of matter*, to which latter point most of the arguments on both sides are directed. This reasoning might, perhaps, be put into the following form: Our I-thinker would be certain of his own existence (for his thinking would in fact *be* his existence), but could only infer the existence of matter as that which was requisite to supply him with materials for thought; and since this material might be supplied by other minds (or even by his own mind acting unconsciously) he could never with certainty infer the existence of a material substance. Now he could not, of course, regard his own existence as in anyway dependent on or conditioned by another thing whose very existence was doubtful. His soul or Ego would therefore be regarded as possessing Unconditioned Existence. (But here again, as all this time I have been merely cogitating an I-thinker in general, what has really been reached is in my opinion only Unconditioned Possibility).

The chief object of Rational Psychology is to prove that the Soul is a substance (or rather that *All Souls are Substances*), for the value of the doctrines of Sim-

plicity, Identity, and even Independent Existence depend upon this. It is not because it is simple, but because it is simple *Substance* (for instance) that we seek to infer its immortality; its simplicity as an *accident* would be quite useless. A similar remark will apply to the other Categories. The whole strength or weakness of the Science, therefore, lies in the argument for Substantiality (or, as Kant terms it, the *Paralogism* of Substantiality), and to this accordingly the discussion in the second edition of the *Critick* is almost entirely confined. The argument is this: *That which can only be employed as subject, and not as predicate is substance. But the I of the I-think can only be employed as subject and not as predicate. Therefore it is substance.* This conclusion evidently amounts to saying that All I-thinkers are substances. The fallacy, according to Kant, is as follows: In the I-think, the Ego or I is undoubtedly the subject, but it does not follow from this that the Ego can *only* be employed as subject. This Ego is also intuited through the internal sense, and as intuited it may be employed as a predicate. It is not true, therefore, that the Ego can *only* be employed as subject. It is only true that it is so employed in the representation or judgment I-think; but this does not bring it within the conditions of the major premiss unless we argue *a dicto secundum quid, ad dictum simpliciter*. A thinker—an I-thinker—*considered merely as such* must be cogitated only as sub-

ject, but it does not follow that this thinker, *considered from every other point of view*, must be so cogitated: which last would be requisite to prove him an Unconditioned subject, or substance. And, indeed, even apart from this fallacy the argument fails of effecting its object. Rational Psychology seeks above all things to prove the immortality, that is the permanence of the Soul. But we have seen that permanence only follows from substantiality under a law whose operation is limited to phænomena, namely, the First Analogy of Experience. From the Substantiality (in the sense of the pure Category) of an object of pure thought, permanence cannot be inferred; and if we turn to internal intuition we find nothing permanent there to enable us to infer that the Soul is (in the empirical meaning of the term = pure Category + Schema), a substance. This Kant had already pointed out in the Refutation of Idealism subjoined to the Postulates of Empirical Thought. It refutes likewise the Fourth Paralogism here which asserts that the Soul exists independently of matter. For the I-Think is an act, not an object. I can only cognise my Soul (or Mind) as an object by bringing in internal intuition. But this is only possible through external intuition, and therefore through an external object. Mind as an object then cannot be said to exist independently of matter, and we cannot prove the continuance of the internal phænomenon after the body has been dissolved by death.

31. Another attempt to construct a Rational Psychology has been made from a different side, but it is equally fruitless. Instead of starting from the general notion of a thinker (or rather an I-thinker), I may set out with the actual judgment I think = I *exist* thinking. Here, of course, I exist thinking in some particular manner—for example, thinking that this paper is white; but if I abstract everything empirical from the judgment actually formed, it has been supposed that I may still obtain from it some information as regards the nature of this Ego who thus exists thinking. My existence is here already given, and I have only to determine (if I can), in what manner I exist. But at this point I lapse into the old Paralogism. I find I am the subject of this judgment, I exist thinking, and thence conclude that I exist as subject or substance; next that I exist as simple substance; next as identical substance (and here I need not go on to the Categories of Modality, for I have already started with my own Existence as actually thinking). But all I can say is, that I am the subject of this particular judgment, I exist thinking. It does not follow that I can exist only as subject, or indeed that I am the subject of any other proposition besides this one. Therefore I cannot conclude that I am Substance, for this is a term which I cannot apply to that which is sometimes subject, and sometimes predicate. It is applicable only to the Absolute Subject. Moreover,

even if I could infer that I was a substance in this sense, my permanence or immortality would not follow. To warrant that conclusion I would require to have an intuition of the Ego to which permanence could be ascribed. I can make nothing of the mere thought that I think. Not, of course, that the Ego of the I-think is a nonentity or a product of imagination. It acts, therefore it exists; but as to *how* it exists—even whether it exists as substance or as accident—I can obtain no information without the aid of Experience.

The Rational Psychology which is here refuted never had much weight in this country. Kant's immediate predecessor Wolff had, however, elaborated a complete system of it. Its object was "from the simple conception of a human mind to derive *a priori* everything that might be observed about it *a posteriori*, together with all the deductions to which these observations lead." In the latter part of the discussion Kant confessedly has in view the famous *Cogito ergo sum* of Descartes, and the inferences which that philosopher drew from it. He likewise digresses into a special refutation of Mendelssohn's argument for the immortality of the Soul. Even if it is simple, he observes, it may be extinguished without a violation of the law of Continuity; for all its powers have a particular degree of intensity, and we can suppose this intensity gradually to fade away till it ultimately sinks to absolute zero.

32. As the Idea of Unconditioned Substance led us naturally to Rational Psychology, so the Idea of Unconditioned Cause leads us to Rational Cosmology; and as the former was irresistibly suggested to us by the mere process of Categorical Prosyllogising so the latter equally results from the Hypothetical Prosyllogism. The great problem in the Universe is, Can there be a Free or Unconditioned cause—an absolute origination of a series of phænomena—or must the series of conditioned causes reach back to infinity? But as in the case of Rational Psychology, ramifications of this great problem of Freedom extend through all four classes of Categories. As regards the Quantity of the World the problem just mentioned naturally leads to this, Has it limits in time or has it not? with the cognate problem as regards its limits in space. As regards Quality the question will be, Can the simple be found in it, or does it contain nothing but what is composite? The correspondence of this Idea of simplicity with that of reality has been already noticed. With respect to Modality there is a problem with regard to the existence of an absolutely Necessary Being in, or in connexion with the world. These problems give rise to the four Antinomies of Pure Reason. Kant expressly bases them on the table of Categories. The Cosmological Ideas he tells us are only Categories elevated to the Unconditioned;

but all of the Categories, when so elevated, do not furnish Cosmological Ideas, "but only those in which the synthesis forms a series—a series of conditions subordinate to not co-ordinated with each other." (*Critick*, 257.) The Categories which fulfil this requisite are traced out at pp. 258–60; yet at the end of the discussion we are left in no slight doubt as to what they are. Causality indeed there is no question about. Neither Substance nor Community gives rise to a series of conditions subordinated to each other, and Causality manifestly does. But I can go no further than this with certainty. Even in Modality, where Kant expressly names the Category, there is no slight obscurity. The *Contingent in Existence*, says he, supposes in the eye of Reason something *absolutely Necessary* on which it depends. (*Critick*, 260). Unconditioned Necessity then seems to be the Idea involved here; but if so, is it not the very same Idea which we again meet with in the Rational Theology? Something similar occurs in the case of the Second Antinomy, the problem of Simplicity being here raised over again, and even the Soul reintroduced from that point of view into the discussion. (*Critick*, 277). Add to this we meet the very same Idea of absolute Simplicity for the third time in the Rational Theology that follows. (*Critick*, 357.) On the whole I think we must be content with observing that Kant arranges the four Anti-

nomies under the four heads of Quantity, Quality, Relation, and Modality, without tracing out the precise Categories involved in each. Indeed the antinomial character of these arguments renders it difficult to limit them to a single Category under each head. Thus in the case of Simplicity we shall find that there are arguments for and against its admission into the sphere of Experience which appear of equal weight, while as regards magnitude we have opposing arguments for a finite and for an infinite Universe. It was, perhaps, for this reason that Kant found it impossible to be more explicit on the subject. The definition of the World by the complete series of conditions is again borrowed from Wolff, against whose Cosmology this part of Kant's work was in a great measure directed.

It is necessary here again to refer to the great office of Reason—to find the Totality of the conditions of a given conditioned. The absolute Totality of the conditions, as has been observed, is always Unconditioned. Reason proceeds (as Kant says) upon the principle that, If the conditioned is given, all its conditions *including the Unconditioned* are given—that is, are so given as to be attainable by research and inference inasmuch as they must have existed. The words italicised indicate the synthetical element of this principle, which is plainly *a priori*, since it arises from the very nature of the Reason. We have only to supply to this principle the minor pre-

miss, But the conditioned is given,[1] in order to conclude that the knowledge of the Unconditioned is attainable. There are thus as many kinds of Unconditioneds as there are of Conditions, which will again correspond to the table of Categories, and especially to those of Relation. But our major premiss has not been proved to be true. It has only been proved that in carrying out its function of giving the greatest possible unity and system to our experience Reason must *act* upon it—that it must in fact employ the Idea of the Unconditioned as an aim or mark by which it is always to direct itself towards its end. But that end may nevertheless be unattainable; it may be only a limit to which we are to approximate, but which we cannot reach. This explanation ought, perhaps, to have been introduced before discussing the Paralogisms of Psychology, for these last are further applications of the same general principle. The conditioned is given as internal phænomenon; and combining this statement with the above general principle, we conclude that the Unconditioned of the internal phænomena is given—that is, attainable—and thus fancy we arrive legitimately at the knowledge of the Soul as a thing *per se*. But it is more necessary to bear this principle in mind here where we have a long series of conditions, each conditioning and conditioned by others.

[1] This argument Kant calls the Dialectical Syllogism.

whereas in the internal phænomena we seem to reach the Unconditioned at the first ascent. Nothing seemed there interposed between the thought or perception of the moment and the Unconditioned Substance the Ego; but if we seek an Unconditioned Cause we have to go back through a series of causes which are themselves caused by a higher cause to an extent which experience at least fails to conduct us to the end of. Now, there are two ways in which we may suppose the Unconditioned to be found in such a series. The absolute totality of the series is of course Unconditioned; but it is possible either that in this regress we might reach a first Unconditioned member, or that the series should go back to infinity. In the first case the series is Unconditionally limited; in the second it is Unconditionally unlimited. Adopting the phraseology of Sir W. Hamilton in his famous Essay on M. Cousin's Philosophy, I may say, that in the former case the Unconditioned takes the form of the Absolute; in the second that of the Infinite. In Rational Psychology where there was properly speaking no series, no such alternative was possible, but here it meets us at every turn. We may of course argue as before, that If the conditioned is given, all its conditions including the Unconditioned is given. But the Conditioned is given as external phænomenon: therefore the Unconditioned of external

phænomena is given; and in the thesis of the Fourth Antinomy the argument takes this course. But in general we presuppose this conclusion as already drawn. We must next decide whether this Unconditioned is an Infinite or an Absolute; and here we find equally strong arguments on either side. In the first three Antinomies (for the fourth exhibits one of those irregularities which constantly meet us in the Dialectic), the thesis maintains that it is found in the shape of the Absolute; the antithesis that it is found in the shape of the Infinite. In all cases too the argument proceeds *ex absurdo*. Starting with the assumption, *The Unconditioned is given*, the *Thesis* proceeds, *But it is not given as Infinite: therefore it is given as Absolute.* On the other hand the *Antithesis* argues, *But it is not given as Absolute: therefore it is given as Infinite.* Taken together the arguments prove that it is not given either as Infinite or as Absolute, and that therefore it is not given at all; which the student of the Analytic will have already anticipated is the inference of Kant.

33. The *Thesis* of the First Antinomy is, *The World is limited both in time and in space.* The *Antithesis* replies, that *It is in both respects unlimited.* These are evidently assertions of what has been designated the Absolute and the Infinite with respect to Quantity. The argument for the thesis as regards time is as follows: If possible let the World

have no limit in past time.[1] Then an infinite series of successive states must have elapsed up to the present moment. But the infinity of a series consists in this, that it cannot be completed by means of successive synthesis. An infinite series of successive states already elapsed is therefore a contradiction. We suppose ourselves to have arrived at the end of our Infinite, which is absurd. Consequently the series which has elapsed is not infinite, and the World has a beginning in time. But, however convincing this argument appears to be, the maintainer of the Antithesis comes forward with an equally cogent proof. Suppose, says he, that the World has a beginning in time. Then it was preceded by a void time. But in this void time all parts are alike, and therefore there could be no reason why the World should have begun to exist at one moment of it rather than at another. Consequently the World was not preceded by a void time, and therefore it had no beginning. The arguments in favour of (or to speak more correctly against) the Infinite and the Absolute thus appear to be balanced, and both seem unanswerable. Kant's solution we shall give hereafter. Similar considerations apply to the Quantity of the World in space.

[1] The prosyllogising process leads us only to *past* time. As to the *future* eternity of the World we have no argument on either side. Both branches may here also be inconceivable; but the question does not turn on conceivableness but on proof

34. Under the head of Quality we meet with the famous problem of Infinite Divisibility, which forms the subject of the second Antinomy. The Thesis is, *All substances in the world consist of simple parts;* the Antithesis, *No substance in the world consists of simple parts, but they are all divisible to infinity.* The proof of the thesis proceeds thus: Take a composite substance, and suppose if possible that it does not consist of simple parts. If, then, we suppose all composition annihilated, what is left? Nothing at all. But a substance means a self-subsisting thing, and therefore must be capable of existing after all composition (which is a mere contingent relation) is done away with. The existence of the self-subsistent cannot depend solely on composition. Hence the supposition that when we remove all composition from a substance nothing is left is contradictory. But that which is left when all composition is removed cannot itself be composite. It is therefore simple The Antithesis is equally sustainable. Suppose, says its advocate, that a composite substance consists of simple substances. Each of these simple substances occupies a part of the space which is filled by the composite substance. But the space which this simple substance occupies does not consist of simple parts, for there are no simple parts of space—it is infinitely divisible. The simple substance therefore occupies a space which is divisible into parts, and may therefore

be itself divided into parts occupying these parts of space; and these parts of the substance must be substances themselves, since they are external to each other, and separable from each other. Hence the simple substance is composed of several substances which is self-contradictory (for by composition is meant being made up of parts—not necessarily of dissimilar parts). There is, therefore, no simple substance in the World.[1]

35. The third Antinomy deals with the question of Unconditioned Causation, or whether the series of causes in the World is finite or infinite. This Antinomy, it will be seen, is closely connected with the first. If the World had a beginning in time, it is clear that the series of causes must also have had a commencement, whereas, if it existed from eternity *a parte ante*, it is more natural to suppose that the series of the causes of any given event reach back to infinity also. The Thesis maintains that *There*

[1] In order to carry out the view already suggested, that the Cosmological Ideas correspond to the second Category under each head, it would be necessary to interchange these two Antinomies. The problem of the First (Kant's second) would then be that of Absolute Plurality (without unity), and of the Second Kant's first Absolute Negation, i. e., empty space and empty time. Kant cautions us, however, that the Antinomy only deals with empty space *beyond* the World: empty space *within* it has been dealt with by the Anticipations of Perception.

must be a (first) free Cause: the Antithesis that *The series of natural causes* (each of which is also the effect of a preceding cause) *is infinite.* The proof of the Thesis is as follows. Suppose the series of causes of a given effect to be infinite. Then each of these causes is a condition of the effect, and since the series can never be completed, the conditions of the effect are not complete. But the effect will only follow if *all* its conditions are presupposed, and in this case, as completeness of the conditions is unattainable, the effect would not follow. There must, therefore, be a completeness of the series of causes in order that the effect should necessarily follow, and this completeness is unattainable without assuming a first free cause.[1] The Antithesis may be defended as follows. Let us suppose a free cause producing an effect. Since the effect arises in time, the cause must act in time; and it could not have been acting in time from all eternity, or its effects would have been produced before. The *action* of the Cause is then something that began to exist, and therefore by the Principle of Causality (the second Analogy of Experience), *it* must have had a cause. Hence it could not have been the first member of the series of causes, nor could it have

[1] Kant adopts Leibnitz's statement of the principle, viz.—There must be a sufficient reason for every event. But if any of the series of conditions is wanting the reason is insufficient.

been free, since it depended on a higher cause. Here for the third time the Thesis finds the Unconditioned in the form of the Absolute—the unconditionally limited; while the Antithesis finds it in the Infinite—the unconditionally unlimited.

36. The fourth Antinomy relates to the existence of an absolutely Necessary[1] Being in or in connexion with the World. The Universe plainly contains many objects whose existence is conditioned—contingent—as indeed is the case with the series of causes and effects mentioned in the last Antinomy; but is *everything* in it contingent, or does there also exist something possessed of Absolute Necessity? The Thesis maintains that such is the case, while the Antithesis denies it. In this form the general principle of ontological reasoning becomes applicable to the cause of the Thesis. This principle is, If the Conditioned be given, the sum of all its conditions, including the Unconditioned, is given (or existent). The Contingent is, in fact, another name for the Conditioned; therefore, if we are given a Contingent existence, we may immediately infer (by what Kant calls the Dialectical Syllogism) an Unconditioned Existence, "which alone," says he, "is absolutely necessary" (*Critick*,

[1] This, I think, should be a being possessed of Unconditioned *Existence*, thus again answering to the second of the Categories of Modality. The absolutely *Necessary* Being rather belongs to Rational Theology.

284).[1] Here we have a direct argument instead of the *ex absurdo* proofs previously used on both sides; but Kant vacillates in his enunciation of the Thesis. The statement of it at the head of the discussion is, "There exists either in or in connexion with the World—either as a part of it or as the cause of it—an absolutely Necessary Being." (*Critick*, 284.) Here the possibility of the Absolutely Necessary Being being identical with the *whole* series is not contemplated: but it is directly referred to in the last sentence of the proof of the Thesis, and is specially refuted in the proof of the Antithesis. This latter proof becomes in this instance a dilemma instead of a simple argument *ex absurdo*, as in the case of the previous Antitheses. Let the absolutely necessary being exist, says the maintainer of the Antithesis, then *either* he must be a First Cause, which has been refuted under the Antithesis of the third Antinomy, *or* else he must be identical with an infinite series of causes, and you will thus have a series conditioned and contingent in all its parts, and yet on the whole absolutely necessary. This last supposition is self-contradictory. Therefore there is

[1] See the last note. But it is certainly not easy to distinguish between Unconditioned Existence and Unconditioned Necessity. A distinction seems to be implied in some parts of Kant's discussion of Rational Theology, but it is not clearly brought out.

no absolutely necessary being. To both thesis and antithesis is appended a proof that the absolutely necessary being must be supposed to belong to the sensible world.

It is evident that this Antinomy differs widely in its structure from the other three, and Kant afterwards signalises another difference himself (*Critick*, 305). But it seems to me that a slight change would suffice to bring all four under the same type. The thesis and antithesis might be assumed to agree (as in the other three Antinomies) that the Unconditioned is to be found in the World, and to differ only as to whether it was to be found in the form of the Absolute or the Infinite. The Thesis might still be announced in the very words of Kant (for we have seen that he does not introduce the possible identification of the absolutely necessary being with the whole cosmical series into his statement of it); while the Antithesis would run somewhat as follows: The whole cosmical series which is infinite is necessary, but no single member of it is so. The argument for the Thesis would then turn upon the contradiction involved in making a series which is conditional and contingent in all its parts absolutely necessary on the whole; while the Antithesis could be maintained on grounds nearly identical with those adopted in defending the antithesis of the preceding Antinomy. As all the Antinomies arise from the natural tendency of Reason to seek for

the Unconditioned, it seems inconsistent to admit among them an argument to prove that there is no Unconditioned at all, which is maintained in the Antithesis of the Fourth Antinomy, as stated by Kant (See *Critick*, 261–2). Kant moreover does not appear to have noticed that the Unconditioned is denied in this Antithesis, for in a subsequent part of the discussion we meet with the following passage, in which the reader will detect the germ of a good deal of Sir W. Hamilton's Philosophy:— "Whatever perceptions you may attain to, you are still surrounded by conditions in space or in time, and you cannot discover anything unconditioned: nor can you decide whether this unconditioned is to be placed in an absolute beginning of the synthesis or in an absolute totality of the series without beginning." (*Critick*, 302.) The remark is evidently intended to apply to the fourth Antinomy, as well as the other three. An alteration in its structure would therefore appear on Kant's principles to be requisite.

These, then, are the four Antinomies of the Pure Reason which constitute the subject-matter of Rational Cosmology. The four theses and antitheses are, as Kant says, "so many attempts to solve four natural and unavoidable problems of Reason. There are neither more, nor can there be less, because there are no other series of synthetical hypotheses limiting *a priori* the empirical syntheses."

(*Critick*, 290.) There is, in fact, only one Category under each of the four heads, which gives rise to a series of subordinated terms such as we meet with in the World; and these four Categories, when elevated to the Unconditioned, afford us a complete list of the possible problems of Pure Reason in this department. But how are these problems to be solved? It is in his answer to this question that Kant makes the most striking employment of the principles already laid down in the Æsthetic and Analytic. In fact, he holds that the Critical Philosophy only can unravel the mystery of these contradictions.

37. We have already seen that the Dialectical Syllogism involves an assumption which has not been proved, namely, that if the Conditioned is given, all its conditions including the Unconditioned are also given. This assumption was involved in the arguments in favour of both the theses and the antitheses of the first three Antinomies, and was directly asserted in the thesis of the fourth. But in reality the office of Reason in its department of Explanation was not to *find* the totality of the conditions, or the Unconditioned, but only to *seek* for them. The Idea of Totality, or of the Unconditioned, was requisite in order that we should not cease to inquire for further conditions in the regressive series of phænomena: but it should not have been assumed that the actual attainment of this Idea

was possible. The cause of the mistake on this point was as follows. If we regard an object merely by the understanding, the only way in which we can think of it as conditioned is by thinking of its conditions. This is the import of the axiom, The knowledge of relatives is one, or The knowledge of relatives is the same. In the very thought of a son, for example, is involved the thought of a father, and in the very thought of greater is involved that of less. In such cases we may truly affirm that if the conditioned is given its conditions are given; for we only learn that the thing *is* conditioned (or relative) by learning that something else conditions it, or is related to it. The understanding, in short, cannot cognise relations between less than *two* things, and a thing cannot be cogitated as relative without at the same time cogitating another thing as its correlative. The major premiss of the Dialectic Syllogism therefore is really true of conditioned objects of thought; but it does not follow that it is true of conditioned objects of intuition. Here we must appeal to sense and not to thought to find whether if the conditioned is given all its conditions are given; and sense appears to reply in the negative. It is not true that starting from a given effect I can actually follow it back either to a first cause or to infinity in the series of causes; and since sensible intuitions are not objects of pure thought, I cannot expect the understanding to clear

up my difficulty. I have no right, therefore, to assume that the Unconditioned is attainable either in the form of the Absolute or of the Infinite. The Dialectic Syllogism is no better than a fallacy. It argues thus: *If the Conditioned is given, all its conditions, including the Unconditioned, are given. But the Conditioned is given: therefore the Unconditioned is given.* Here "the conditioned" in the major premiss means *a conditioned object of thought*, while in the minor premiss it means *a conditioned object of intuition*. There is, therefore, an ambiguous middle, and the whole set of perplexing arguments are at once overthrown.[1] But of course the arguments are only shown to be fallacious to those who admit the essential distinction between objects of intuition and objects of pure thought; and it is difficult to assert this distinction upon other grounds than those of the Critical Philosophy.

But it will be said, If a conditioned object exists must not all the conditions for its existence have been fulfilled? Must not, therefore, all its conditions (including the Unconditioned) exist, or have existed? And if so, is it not plain that the World must be either finite or infinite, and that there must

[1] Except the Antithesis of the Fourth Antinomy, which, as stated by Kant, does not turn upon the Dialectical Syllogism. I have already given my reasons for thinking that Kant has here been guilty of an oversight.

be either a first cause or an infinite series of causes, however fallacious the arguments in favour of either alternative may have proved? This is the question which Kant believes his system is exclusively competent to answer. For its solution we must return to his doctrine of the Sensibility and his Principles of the pure Understanding. We there learned that phænomena (sensible objects or objects of experience), were nothing but sensations or perceptions in time and space bound together by certain mental laws or forms known as the Categories and their Schemata. I have remarked that Kant manifestly included *possible* perceptions (as well as actual) in his notion of a phænomenon; indeed otherwise a permanent phænomenon would be impossible since no actual perception remains permanently present.[1] Possible sensations in time and space thus come to be regarded as parts of the world of experience as well as actual sensations; and to the same world also belongs whatever is connected with our sensations by fixed laws of experience, since these are also in a certain sense possible. Under other circumstances I should have had them, and that these circumstances could only have occurred previous to my actual connexion with the world of experience

[1] Kant accordingly says that there is no such thing as a permanent representation although the representation of the permanent is the condition of all experience. (*Critick*, xli. note).

makes no difference. Thus the Battle of Pharsalia was a real event, because if I had been at Pharsalia two thousand years ago I would have had experience of it; and my conviction that such is the case again rests upon the fact that I believe (on evidence which I consider satisfactory), that my present experience might be connected with the battle of Pharsalia by means of an unbroken chain of possible perceptions, all of which under certain supposable circumstances I would have had; and which I believe other men actually had. Accordingly the Second Postulate of Empirical Thought asserted the real existence of everything that coheres with the material conditions of experience—of which the continuous chain of causes and effects is the most remarkable example. Real Things we also saw (under the Analogies of Experience), differed from purely imaginary objects in this, that they were connected immediately or remotely with every other fact in the vast domain of Experience. So far as this connexion may possibly be traced, the objects though not actually perceived are real; and in this way I may speak of real things existing on this earth millions of years before the creation of man, because I find indications of an unbroken chain of possible perceptions—generally in the way of cause and effect—connecting them with my present experience. But the only reality which a sensible object can possess consists in being perceived either actually or possibly—either in forming

a part of my intuitive consciousness, or in being connected with that consciousness by a train of traceable links in one universal experience. The World is the sum of these objects of experience, and of course its reality is of the same kind as theirs. "That there may be inhabitants in the moon although no one has ever observed them," says Kant, "must be admitted; but this means only that we may in the possible progress of experience discover them at some future time. That which stands in connexion with a perception according to the laws of empirical regress is real. Objects therefore are really existent if they stand in empirical connexion with my real or actual consciousness, although they are not real *in themselves*, that is apart from the progress of Experience." (*Critick*, 308.) Hence, with regard to objects which are supposed to have existed in past time, they are to me "real objects only in so far as I can represent to my own mind that a regressive series of possible perceptions, following the indications of history, or the footsteps of cause and effect, conducts us to them as an elapsed series in time which forms a condition of the present. This series in past time is represented as real, not in itself, but only in connexion with a possible experience; and when I say that certain events occurred in past time, I merely assert the possibility of prolonging the chain of experience from the present perception" backwards to these events. (*Critick*, 309.)

These principles afford all that is necessary for the solution of the Antinomies. Applying them specially to the leading Antinomy—the Third—we arrive at the following results: 1. There cannot possibly be a first free cause standing at the beginning of the series of events. For the causes which we reach in our continuous regress must always be phænomena, and their causal action must have had a commencement in time, and therefore must have been determined by antecedent causes. The argument in the Antithesis of this Antinomy is therefore perfectly irrefragable so far as it confines itself to disproving the existence of a first free cause. 2. But on the other hand it is not possible that the series of causes could be actually infinite. When I say that certain events really occurred in past time I mean (as Kant says in the passage just cited), that it is possible for me to start from my present experience and prolong the chain of experience backwards until I actually reach them; and although it is impossible to say how far this chain may (possibly) be prolonged it is subject to one manifest restriction—it cannot be actually prolonged to infinity. The very same solution applies to the First Antinomy. The World cannot have a beginning in time. This is indeed excluded by the First Analogy of Experience. But the past states of the World are only real so far as they can be connected with its present state through an unbroken chain of possible

perceptions; and as no such chain can actually extend to infinity, the World cannot be really eternal *a parte ante*. Similar considerations apply to space. An end of the World in space would imply a definite limit to possible experience which the Principles of the Pure Understanding have shown to be impossible; and on the other hand an actually infinite World (in space) would suppose the possibility of an actual infinite series of perceptions, which is likewise impossible. The Second Antinomy admits of a similar solution. We cannot subdivide matter to such an extent as to render further subdivision impossible; but on the other hand actual infinite divisibility supposes that we could follow out an actually infinite series of perceptions. Now, in these three Antinomies[1] the reader will remember that what was really proved in the Thesis was the falsity of the Antithesis, and what was really proved in the Antithesis was the falsity of the Thesis; for the arguments in all cases proceeded *ex absurdo*, and inferred the one alternative from the impossibility of the other. Kant, it will be seen, admits the validity of both arguments. The Thesis, says he, has incontestably proved that the Infinite is not to be found

[1] The Fourth Antinomy is so peculiarly constructed that I am obliged to omit it; though Kant does not seem to have noticed the difference. (*Critick*, 315.) In it the Antithesis coincides with the doctrine of Kant in denying that the Unconditioned is to be met with in experience in *any* form.

in experience; the Antithesis proves with equal force that the Absolute is not to be found in it. Taken together they prove that neither the Absolute nor the Infinite is to be found there, and my theory as to the nature of empirical objects accepts this result, and explains it. The Absolute and infinite are, in fact, two forms of the Unconditioned. Now the Thesis proves that the Unconditioned is not to be found in experience in one of these forms, and the Antithesis that it is not to be found in the other. The necessary conclusion is, that the Unconditioned is not to be found in experience at all. However strange such a conclusion may seem, it follows necessarily if we admit that objects of experience are not things in themselves but mere phænomena. Their *esse* is *percipi* (including under that term the possibility of being perceived). That which it is impossible to perceive is not an object of experience, and therefore does not exist in the World; but it is utterly impossible that we could perceive either a first object, or an object infinitely distant from the present. It seems a paradox to say that though all objects in the World have a quantity, the World itself is neither finite nor infinite in respect of quantity. But the fact is, that the World-whole has no *determinate* quantity; therefore it is neither determinately finite, nor determinately infinite. The World-whole may be compared to a solitary lamp shining in a space open in all directions. Its light has no determinate limit.

There is no point where we can say, Here the light ceases, and the darkness begins. Even if we recede so far as to lose sight of it altogether we feel convinced that, if we had finer senses, we should still perceive it, and we can in fact make it visible by the aid of a telescope. At what distance it might be rendered visible by finer senses, and more powerful telescopes, no one can say. But there is one limit to the distance at which it can become visible. It cannot be infinite. No senses or telescopes, however perfect, could extend its visibility to an infinite distance. The lamp in this simile represents the present moment. Empirical objects fade away, if I may so speak, as they become more distant from it either in the past or in the future; and while there is no fixed limit to their reality—their illumination—we know that it cannot extend to infinity.

Indeed Kant believes that his system is so exclusively competent to solve these enigmas of the Pure Reason that he derives a proof of its fundamental principle from the Antinomies. This proof proceeds on the following dilemma. If the World-whole be a really existent Thing (in itself), it must be finite or infinite in respect of quantity. But it is not finite, as is proved by the Antitheses, and it is not infinite, as is proved by the Theses. Consequently it is not a Thing in itself, and consequently again it is a mere Phænomenon (or aggregate of phænomena). From the major premiss

here there appears to be no escape. For the World-whole of which we speak is not an unknown Thing or Things producing in us the sensation-groups which we call sensible objects. If this were so indeed we might find another way out of the difficulty by denying that the World in this sense had any quantity at all. But the World-whole of which we are speaking in these Antinomies is the sum-total of all sensible objects in the present and in the past; and as each of these objects has a quantity (according to the Axioms of Intuition) it is impossible that their sum-total should have no quantity. But we may maintain with Kant that this sum or whole has no *determinate* quantity, or perhaps, more accurately, that sensible objects (or experience) do not form a definite Whole. If they existed independently of our minds, we must suppose them to form such a Whole; but if they exist nowhere but in the mind, then the reverse is true, for the simple reason that no human mind is capable of collecting all sensations and possibilities of sensation into one Whole.

38. The Antinomies then are solved; but from our solution of the Third Antinomy it would seem that no free causation—no absolute origination of a series of events—could be admitted in the domain of experience. Is then the Critical Philosophy subversive of Free Will in Man, which seems so necessary for the explanation of Moral Obligation?

And are we compelled for the same reason to deny the dependence of the World on a Divine Author? These questions meet us at this stage, and here again Kant thinks the principles of his Philosophy enable us to reconcile the conflicting claims of Naturalism, Theism, and Ethics. What has been proved is that there can be no free cause among phænomena—that no free cause can be an object of experience. But we have seen that Kant believes that a Noumenon or Thing in itself is absolutely required to account for the Phænomenon; for how can there be an Appearance without Something that appears? Our sensibility is purely passive. How then could it exhibit representations at all if some unknown thing did not act upon it? In his *Prolegomena to any Future System of Metaphysic*, Kant strongly insists on the existence of these Noumena or Things *per se*. (See Mahaffy's *Critical Philosophy*, III., 54–6), and the same assumption constantly occurs in the *Critick*. In our own case we have some direct evidence for the fact. The *I think* not being an intuition but a thought—not being a passive affection but a spontaneous act—cannot be ascribed to sensibility, and the *I*, which is involved in it, is not a phænomenon. It is true, as has been observed already, that we thus obtain no *cognition* of this *I*, and cannot even determine whether it is substance or accident; but though the *manner* of its existence is not given, its existence is given, and is

not given (in the *I Think*) as a phænomenon. There are, then, Noumena as well as Phænomena, and I may presume that I myself am a Noumenon (though I cannot *cognise* myself as such). But our principles have determined nothing against free action in a Noumenon. On the contrary, the law of Causation has only been proved as a law of Phænomena in time; and if we assume the existence of a Noumenon, we might almost conclude that it is *not* subject to this law. But still it may be asked, How can the free acts of a Noumenon, which does not exist or act in time, affect phænomena in time? Such acts cannot surely form parts of the series of events which occur in our experience; and if they do not, human volitions cannot be exempted from the law of causation, according to which every one of them is absolutely determined by the antecedent events in time. If they are thus predetermined, and capable of being predicted beforehand, how can Free-will have anything to do with them? Granted that though I can only cognise myself as a phænomenon I am also a Noumenon, and that as a Noumenon I am free, this brings me no nearer to the solution of the difficulty; for my volitions are phænomenal acts (or states), and as a phænomenon I am not free.

Kant admits in his answer "that all the actions of man in the world of phænomena are determined by his empirical character and the co-operative

causes of nature ; and therefore if we could investigate all the phænomena of human volition to their lowest foundation in the mind, there would be no single human action which we could not anticipate with certainty, and recognise as absolutely necessary from its preceding conditions." (*Critick*, 340.) A fuller declaration of the Necessitarian principle seems impossible; but the reader will have noticed that Kant does not say that the prediction could be made from the preceding circumstances alone, but from these combined with the man's "empirical character." Indeed, that different men have different characters, and would in consequence of this difference act differently under the same external circumstances, is too obvious a truth to escape the observation of any one. But then a Necessitarian would probably say that this empirical character was itself formed by previous external circumstances. This Kant would not wholly deny. In the case which he puts of a man telling a lie, he says that if we desire to find out why he told it, we must pursue exactly the same kind of investigation that is required for the discovery of physical causes of a physical effect; and among the contributory causes he mentions defective education, bad company, &c., as well as the "occasioning causes which prevailed at the moment of the transgression." (*Critick*, 342–3.) That preceding circumstances may modify a man's empirical character, and make it different from what

it would otherwise have been, seems thus admitted; but Kant would insist that prior to this modification the man had *some* character or other. In fact, a character of *some* kind is implied in the very susceptibility of being affected or altered in character by these circumstances; and even if this original unmodified character was the same in all men, it would not affect the question at issue. Indeed, in Kant's language every object might be said to have a character —an empirical character—for a character is nothing but a law of causality. Thus it is a part of the empirical character of wood that it resists a compressing force, weighs less than the same bulk of water, and burns in the fire; and so it is a part of the empirical character of a man that he requires food and drink, and that he desires knowledge, power, and sympathy from his fellows. An empirical character must therefore be conceded to every man, and without it his volitions could not be predicted from any knowledge of the objects which surround him. If, for example, the greatest apparent good or the most pressing uneasiness determined his volition in all cases, still I could not, from a knowledge of the external circumstances alone, predict what would appear to him to be the greatest good or what uneasiness would be felt as the most pressing. Even if Physiology should hereafter discover corporeal antecedents which were invariably followed by the suggestion of apparent goods or by

pressing uneasinesses, and if these were the same in all men, this could only be ascertained by repeated observations as to what feelings and acts followed these corporeal states—in other words, by observing the empirical characters of men. The antecedent never contains in it anything which would enable us to ascertain *a priori* what consequent would follow it, for the simple reason that the consequent depends on the nature—in other words the empirical character—of the patient as well of the agent.[1] No explanation, therefore, can ever be given of the phænomena of volition which does not take account of this empirical character of man.

But this empirical character is the phænomenon —the reflex—the appearance—of an intelligible character which belongs to man as a Noumenon, just as the empirical character belongs to him as a Phænomenon. And the empirical act of will—the volition—is also the appearance of an unknown and unrecognisable act in the intelligible world—the world of Noumena. This must be admitted if we admit that to

[1] No reason can ever be given why *this* consequent rather than another should follow from *this* antecedent. The empirical character merely generalises the fact that it *does*. If the intelligible character could be cognised an explanation might be possible, but at present in physical explanation we must accept the generalised fact as ultimate—at least if it is generalised to the fullest extent.

every appearance corresponds a thing (in itself) which appears—to every phænomenon a noumenon. Now the intelligible acts and intelligible character of a noumenon cannot depend on preceding conditions in time; for a phænomenon which exists only in my consciousness could not be the necessary condition of a noumenon which exists independently of my consciousness. The Noumenon is not subjected to the Analogies of experience, and therefore the *proof* that the phænomenon is not free is here inapplicable. It is true indeed that its intelligible character and acts may not be freely formed, but may in some way incomprehensible to us be dependent on other Noumena, and this perhaps actually holds good of the Noumena which lie at the basis of inorganic matter. But it is equally true that in its intelligible character and actions the Noumenon may be free, and in the case of the human noumenon (if I may use the phrase) the fundamental principles of Morality compel me to make the assumption that it is so. As a Noumenon, therefore, I am free, both as regards my character and my acts, and consequently I am morally responsible for both; and so, too, I become responsible for my empirical character and actions, since if I made a different use of my freedom in the intelligible world the resulting phænomena in the sensible world would have been different also. But as Morality relates directly to the free intelligible act which I cannot cognise, Kant is

led into a rather paradoxical statement that "the real morality of actions, their merit and demerit—even that our own conduct—is completely unknown to us" (*Critick*, 341); for I can cognise only the empirical character, and therefore all my estimates of merit and demerit relate to it. The reader must here be on his guard not to think of the Noumenal Ego as freely producing the empirical character of the Phænomenal Ego at birth, and then leaving every subsequent act to be necessarily determined by the antecedent circumstances. The Noumenal Ego is as near to (or as remote from) my present act as it was to the first empirical act which I performed in the sensible world. My experience is like the earth revolving round the sun, except that it seems to describe a more accurate circle, for it keeps at the same distance from the Noumenon throughout. My first phænomenal act was as necessary as my last will be, and the intelligible act of which my last empirical volition will be the phænomenon may be just as free as that which was phænomenised in my first. The noumenon and the phenomenon move as it were in different planes, and the freedom of the one cannot interfere with the necessity of the other. The series of phænomena may perhaps be compared to the inverted images of men passing along the street, which we may see in the large round bottles of green or blue fluids in a chemist's windows. While the real passers-by

are clad in different colors and walk straight on, the images walk round, and all appear to be of the same color with the liquid.[1] Or we might adopt a simile of Mr. Mill's on a different occasion, and compare experience to the kaleidoscope, in which by the construction of the instrument any casual arrangement of a number of bits of glass is made to exhibit perfect regularity and order. We should here bear in mind that according to the Transcendental Analytic all the regularity and order of nature is introduced into it by the human understanding. "The order and regularity in phænomena which we call nature," says Kant, "we ourselves introduce, and should never find it there if we or the nature of our mind had not placed it there" (*Critical Philosophy*, III., 215); and accordingly he says in the next page that the understanding "is itself a code of laws for nature;" and is "the source of the laws of nature." It is phænomenization that produces Necessity.

39. We now arrive at the third Idea of the Pure Reason—that of God. This Idea, according to Kant as well as his Ontological predecessors, is that of an Ens Realissimum or Sum of All Reality. Those who entertain a different notion of God need not trouble themselves if we fail to prove the ex-

[1] But the difference is one which no illustration can give a clear idea of, since in all our illustrations we can only compare two classes of phænomena.

istence of a Being corresponding to this one, and indeed the notion is, as Kant says, strictly Deistic. It is derived from the process of disjunctive prosyllogising. When I want to obtain a complete knowledge of the properties or attributes of anything, I proceed disjunctively in the following manner. I commence by laying down that A (the thing whose properties I am inquiring about) either has the attribute *a* (which may be any real attribute), or it has not. On inquiry I find that (suppose) it has the attribute, and thus conclude that A is *a*. I now take another real attribute *b*, and proceed to inquire whether A is *b* or *not-b;* and having ascertained (suppose) that it is *not-b*, I draw my conclusion accordingly. At every step in this process my notion of the qualities or properties of A is becoming more clear and determinate. But what would be necessary in order that my determination of its properties should be absolutely complete? Plainly, that I should compare it with all real attributes, and ascertain whether it did or did not possess each of them. So long as I had omitted to compare it with one real attribute (call it *x*) my notion of A would not be completely determined, for I would still have left it undecided whether A was or was not *x*. But if I completed my comparison, and took in all possible positive predicates, I could, in point of determination, go no farther. My knowledge of the properties of A would be absolutely perfect. Now here

again the number of possible positive predicates if not infinite is probably indeterminable, and therefore I can never actually complete my knowledge of the properties of any given object; but it is evident that in my progress towards its completion—in endeavouring to make it as complete as possible, which is the very office of Reason—I must act under the guidance of an Idea. This Idea is that of the Sum of All Positive Predicates (or attributes), which is therefore necessarily originated by the Reason in endeavouring to perfect our Knowledge disjunctively. And this Idea like all other Ideas seems to represent a Thing in itself. Nor is there any absurdity in supposing that such a Thing *per se* corresponds to it. For contradiction only exists between positive and negative predicates—between *a* and *not-a*; and this Idea being composed exclusively of positive predicates is not self-contradictory. Now Kant's predecessors—Wolff especially—had laid down as a fundamental position in Philosophy that whatever is not self-contradictory is possible, and hence the possibility of this Ens Realissimum had been inferred. The reader will have remarked that Kant in the Postulates of Empirical Thought had laid down a different canon of possibility *in experience*, and he declines to accept the Wolffian canon without proof, even in the supersensible world. There is another peculiarity of this Idea that should be noticed before we go further.

The object of it (if it has any object) must be *one*. As long as a thing possesses any negative predicate there is a possibility of other things of the same kind existing, for while *a* is a definite notion, *not-a* is indefinite, and may be subdivided into several distinct things. But if all the attributes of a thing are positive, it is perfectly definite in every respect, and does not admit of further individualisation. For this reason Kant designates the Theological Idea the Ideal of Pure Reason.[1] And this Ideal comes to be regarded not merely as a Being possessed of all positive attributes, but as a kind of sum (or rather ground) of all real beings—a true *omnitudo realitatis*. For finite beings differ from the Ideal only in their negative attributes, and a negative attribute is a derived one, which presupposes the corresponding positive, and derives all its meaning therefrom. Negative predicates are in fact *limitations*, and therefore suppose the unlimited as their basis. All things whatever, except the Ideal, have negative

[1] The Theological Ideal has got several designations. The Sum-total of all Possibility is used as well as the Sum-total of all Reality, and both seem to have the same meaning, viz., the Sum of all *Positive* Possibilities. So it is spoken of as the most Perfect Being, positive attributes being taken to indicate perfection, and negative attributes imperfection. So again it is called the *Ens Summum, Ens Originarium, Ens Entium*, &c., all of which are different ways of naming the supposed object of the same Idea.

attributes, and are therefore limited—conditioned. Consequently, they relate to an Unconditioned, which can only be the Ideal. But this Ideal cannot, strictly speaking, be regarded as the *sum* of all real things.[1] "A primal Being," says Kant, "cannot be said to consist of many other beings whose existence is derivative; for the latter presuppose the former, and therefore cannot be constituent parts of it. It follows that the Ideal of the primal being must be cogitated as simple. . . . . This highest reality must therefore be cogitated rather as the *ground* than as the sum-total of the possibility of all things; and these things must be regarded as based not on the limitation of the primal being itself, but on that of the complete series of effects which flow from it." (*Critick*, 357.) It is evident that *if a Being corresponding to this Ideal exists* his existence cannot be dependent on any higher condition, and that all other beings will be dependent on him. But *does* he exist? That is the real problem.[2]

[1] By real things we must here mean things possessing one or more positive attributes. That which is entirely composed of negations is unreal.

[2] As already noticed, Kant does not apply the table of Categories to the Ideal. The foregoing account would seem to imply that we should take the most purely positive Category under each head, and raise it to the Unconditioned. But in carrying out this I think we should have to employ Unconditioned Categories

40. There are in all three arguments to prove the existence of the Deity on grounds of speculative Reason. One endeavours to prove the existence of a corresponding object from the Theological Idea itself. This Kant calls the Ontological argument. The second starts from an object of experience, but without regard to what kind of object it is, and argues from this object as a contingent existence to a Deity on whom it depends. This Kant calls the Cosmological argument. The third is the well-known Design argument, which of course rests on the particular character of our experience and its objects. Kant calls it the Physico-Theological argument. The Moral argument does not fall within the province of speculative Reason.

In substance the Ontological argument is this. God is the sum of all real predicates (or perfections). But existence is a real predicate (a perfection). Therefore God exists. To this it might be replied that, since we profess to obtain the existence of God by a mere analysis of the Idea of him we might by the same method prove the existence of anything by first adding that attribute to the concept of it. For example, I might form the notion of an *existing* bilinear figure, and thence infer that a bi-

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that have been already appropriated to the Soul or the World. The following arguments likewise do not admit of a Categorical arrangement.

linear figure existed. A Leibnitzian would probably answer that we could not infer that a bilinear figure existed, but only that an existing bilinear figure existed; and that, as there might be no such thing as an existing bilinear figure the conclusion was still unproved. But here again the Kantian could reply that no doubt if there was such a thing as an Ens Realissimum it existed, but that there might be no such thing at all. Leibnitz modified the argument slightly in order to meet this difficulty. He thus states it in a letter to Bierling. "Ens ex cujus essentia sequitur existentia *si est possibile* (id est se habet essentiam) existet. Est axioma identicum demonstratione non indigens. Atqui Deus est ens ex cujus essentia sequitur ipsius existentia. Est definitio. Ergo Deus si est possibilis existit (per ipsius conceptus necessitatem)."[1] Now, here (as it is evident that we cannot presuppose a knowledge of the real essence of God as He exists when we want to prove his existence), "essentia" must mean the nominal essence—the definition of the term God. The argument may then be thus rendered. A Being whose concept contains existence *if it is possible* exists. But God is such a Being. Therefore *if he is pos-*

[1] The reader will understand from this argument the meaning of Kant's statement, that Necessity is a combination of Possibility and Existence—a Necessary Being being a thing whose existence is given in the possibility of it.

sible he exists. And that a Divine Being is possible Leibnitz would infer from the fact that the concept of him contains no contradiction. This we have seen is not a sufficient test of possibility according to Kant, and therefore the argument proves nothing. But to reply to it in full we must examine more minutely the nature of our notions of Possibility, Existence, and Necessity.

Propositions or Judgments which assert possibility, existence, or necessity, have already been stated by Kant to be synthetical, and therefore they can never be inferred from the mere concept or notion of the subject. But still they differ from all other synthetical propositions. Other synthetical judgments enlarge my concept of the thing. When I judge that a right line is the shortest line between two points I enlarge my concept of a right line by adding to it the attribute of shortness which was not contained in it. When I judge that all animals with horns on the skull ruminate, I enlarge my concept of a horned animal by joining to it the new attribute of rumination. Such synthetical predicates Kant calls *real* predicates because they render our notion of the subject more extensive and determinate; and the judgments in which they are asserted are *objectively* synthetical. But when I say a thing is possible, or exists, or is necessary, I do not enlarge my concept of the thing in the least. If I judge that a black swan is possible, my notion of the black swan is

exactly the same as it was before I formed the judgment, and when I go on to judge that it exists my notion of it is still unaltered. Assertions of possibility, existence, and necessity, therefore, do not alter or increase my conception of the thing, or determine the nature of the object. The thing is cogitated with the very same attributes before I have judged to be possible, and after I have judged it to be possible, existent, or necessary. "The real (existent)," says Kant, "*contains* no more than the possible. A hundred real dollars contain no more than a hundred possible dollars. For, as the latter indicate the *conception* and the former the *object*, on the supposition that the content of the former was greater than that of the latter, my conception would not be an expression of the *whole* object, and would consequently be an inadequate conception of it." But, nevertheless, "the real (existent) object—the dollars—is not analytically contained in my conception, but forms a synthetical addition to it." (*Critick*, 368). "I do not in the least augment the object of my conception by the addition of the statement that it exists. Otherwise, not exactly the same, but something more than was cogitated on my conception would exist." (*Critick*, 369.) Such judgments then not being objectively synthetical it is more easy to deceive ourselves with respect to the possibility of deducing them from concepts. But though not objectively synthetical they are so *subjectively* as

has been shown in the case of the dollars. When I assert that a black swan exists, I do not mean that I have the idea of a black swan, but that something corresponding to that idea is to be found independently of it. And so, when I say God exists, I do not merely mean that I have the idea of an existing God, but that there is a Being without me corresponding to this idea. Now, no concept can ever inform me that there is independently of it a Being which corresponds to it; consequently no assertion of real existence can ever be deduced from the mere analysis of a concept. All existential judgments are synthetical, and as has been already shown no synthetical judgment can be proved from concepts only; while even if it could be thus proved it would not give us the kind of existential judgment we are seeking for. Every man is an animal, is no doubt proveable from concepts only, but it means no more than that, *if there be such a thing as a man*, he is an animal; and Every centaur is an animal, is in this sense equally true. So, when we infer the existence of the Ens Realissimum from the concept of it, our conclusion that the Ens Realissimum exists means no more than that, *if there be an Ens Realissimum* it exists. And similarly, if there be an existing bilinear figure it exists also. Further, we are as much justified in assuming that a bilinear figure is possible as that an Ens Realissimum is so; for our only reason for believing that the latter is possible

is, that the concept of it involves no contradiction, and this is equally true of the bilinear figure. As Kant says, if I deny the predicate, and retain the subject of an analytical judgment I contradict myself (and therefore I cannot deny the existence of the Ens Realissimum so long as I retain it as the subject of my thought); but if I suppress both subject and predicate no contradiction results, and a resulting contradiction is the only conceivable reason why I cannot annihilate any particular thing in thought. I can therefore annihilate the Ens Realissimum in thought, and when I do so I annihilate its existence along with it. I am not, therefore, compelled to believe in the existence of the Ens Realissimum. If you say that I cannot annihilate it in thought, I ask why not? I violate no law of thought in doing so, for there is no resulting contradiction. The Ontological argument therefore fails. I can neither prove the possibility nor the existence of a thing from the mere concept of it; for all such assertions are synthetical, and I cannot form them without going beyond the concept. If the Ens Realissimum is possible it exists, and if it exists it is necessary; but you can never get clear of these "ifs" so long as you are dealing with concepts. A concept, in fact, is always problematical, and the question of existence relates to what can be ascertained about the thing, not by the faculty of thought (or the concept), but by some other faculty. You

can evolve nothing out of the concept which was not involved in it, and if the existence of God is involved in the concept of the Ens Realissimum (which we have seen cannot be the case), you have his existence without the need of any argument. Much of Kant's reasoning here turns on the ambiguity of the word *existence*, which, he says, he hoped to have been able to clear up by defining its various senses; but on reflection he seems to have found a strict definition impossible. He therefore confines himself to showing that the only propositions asserting existence which could be of any use in Theology are synthetical, and cannot therefore be proved by a mere analysis of Ideas.[1]

41. The second argument, which is known as the Cosmological, need not long detain us. It proceeds thus: If a contingent being exists, a necessary being exists. But I am a contingent being which exists; Therefore a necessary being exists. But this necessary being must be the Ens Realissimum since everything else depends upon that. Therefore

[1] The difference between the Theological Idea, and the notion of an existing-centaur, &c., seems to be this: in the latter case we have specially introduced existence into our notion, whereas in the former it has been brought in by a general description which was not seen at the time to include it. But *is* existence included in the Sum of All Positive Predicates? I think Kant (on the grounds stated in the text) might have fairly contended that it is *not*. It is not, properly speaking, a predicate at all.

the Ens Realissimum exists. Now, in the first place, how do I know that my existence is contingent? The very school of Philosophers who urge this argument most strongly believe in the pre-existence and eternity of the Soul. The only proof of its contingency is, that there is no contradiction in supposing its non-existence; and as these Ontologists held that everything was possible whose existence involved no contradiction, so they held everything to be contingent whose non-existence involved no contradiction. But this assumption is quite incapable of proof, and if it could be proved it would establish the impossibility of a necessary being, since even the Ens Realissimum may be supposed non-existent without a contradiction. Again, granting the contingency of my own existence, the inference of the necessary from the contingent has been shown to be invalid by the antithesis of the Fourth Antinomy: and moreover, if valid, it could only lead me from a contingent phænomenon to a necessary phænomenon (not to a necessary noumenon). But, further, supposing the inference from the contingent to the necessary to be in all respects valid, how am I warranted in identifying this Necessary Being with the Ens Realissimum? It is true, that, if the Ens Realissimum exists it must possess Necessary (or, perhaps, to speak more accurately, Unconditioned) existence, since it cannot be dependent on any higher condition. And, if it

exists nothing else possesses necessary existence, since everything else would be dependent on it. But if the Ens Realissimum does *not* exist, what is to prevent limited beings (i. e. beings some of whose attributes are negative) from possessing this property of necessary existence? It is true that I cannot infer the necessity of their existence from my concept of them, but there is not a thing in the world all of whose properties can be deduced from any concept of it that I am capable of forming; and this for the simple reason that a concept is always a partial and inadequate representation of a thing. The Necessary Being, therefore, can only be identified with the Ens Realissimum on the supposition that the latter has been already proved to exist; and to prove this we must fall back on the Ontological argument which has been already refuted. Indeed these two arguments virtually seek to prove the same proposition. The Ontological argues that the Ens Realissimum is a necessary-existent being: the Cosmological argues that the Necessarily-existent Being is an Ens Realissimum. In both cases it is plain that the grounds of proof must be the same, since in both cases we have to connect the same concepts *a priori* without the aid of experience.[1]

[1] Kant once or twice in this discussion hints at a distinction between Unconditioned Existence and Unconditioned Necessity, but it is nowhere carried out. It seems conceivable that an ex-

42. The third speculative argument for the existence of God is the Design argument, which Kant designates the Physico-Theological. Since, it is said, we can prove the existence of a human artist from his works, we can equally infer the existence of a superhuman artist from his works; and the Universe, in fact, displays that adaptation of means to ends, which is the leading indication of art and intelligence in the former inference. Whether this argument from the order, beauty, harmony, and conformity to ends visible in the World, to a superhuman intelligence is absolutely conclusive, or only highly probable, is a point on which Kant has not, perhaps, given a positive opinion; but from several passages in the *Critick* I apprehend that he would adopt the latter view. That it possesses the highest degree of probability, at all events, he willingly acknowledges. "If we are to discuss the subject of cause at all," says he, "we cannot proceed more securely than with the guidance of the analogy subsisting between nature and those" (human) "products of design—these being the only products whose causes and modes of origination are really known to us. Reason would be unable to satisfy her own requirements if she passed from a causality she does know to obscure

istence might depend on no higher condition, and yet not be absolutely necessary. Even if the Ens Realissimum exists, therefore it might still be possible to question its absolute necessity.

and indemonstrable principles of explanation which she does not know." (*Critick*, 384.) Accordingly, he observes, that this argument is "the oldest, the clearest, and that most in conformity with the common reason of humanity." (*Critick*, 383.) Where, then, lies the weakness of this famous argument? Kant replies that its defect is to be found in the part of it which attempts to identify the superhuman intelligence with the Ens Realissimum. It will then be seen that those who are contented to stop at the inference from the order of the Universe to a superhuman intelligence are unaffected by the results of the *Critick;* but those who attempt to identify this intelligence with the Most Real (or Most Perfect) Being must be prepared to reply to the philosopher of Konigsberg. The first defect that Kant finds in this part of the reasoning is, that the Design Argument does not prove the existence of a Creator, but only of an Architect of the universe. The human artist does not create the matter on which he works, but only moulds it to his wishes, and his triumph is considered all the greater the more intractable the material which he ultimately succeeds in reducing to form. It is, in fact, essential to the very idea of human art that the efforts of the artist should be "limited by the capabilities of the material with which he works" (*Critick*, 385); and in our analogical reasoning we cannot avoid extending the same conclusion to the superhuman artist. There is, moreover, another defect. Grant-

ing the existence of this superhuman artist, the argument leads to no definite conception of him, still less to his identification with the Ens Realissimum. The works which we ascribe to this artist, however great, are finite, for no one will surely be able to trace marks of design in more than a finite number of instances, or in other than finite objects. How, then, are we to prove the existence of an infinite author of nature by such means? We can only infer the existence of a cause proportioned to the effect, and though we may speak of this cause as "very great, astonishing," &c., these are all relative words which afford no determinate conception of the object. (*Critick*, 385.) In short, says Kant, "the attainment of Absolute Totality is completely impossible on the path of empiricism; but this is the path pursued in the Physico-Theological argument." (*Critick*, 386.) If we are to find a *determinate* concept of the Supreme Cause which shall serve as the basis of a Rational Theology we must adopt a different course.

One thing the Physico-Theological argument has proved—the contingency of the *form* of the Universe. It shows that its present form did not belong to the World as such, but that it was brought into this form by the operation of a superior intelligence. Now, if we desire to identify this superior intelligence with the Ens Realissimum the only course open to us is the following: From the contingency

of the form of the Universe we infer the contingency of its matter; from this contingency of the matter we reason to the existence of an absolutely necessary being; and lastly, we seek to prove that this absolutely necessary being is the Ens Realissimum. The first of these steps is plainly invalid, for the contingency of the form does not in any way imply the contingency of the matter; but conceding this first step to the reasoner, his second leads us back to the Cosmological Argument, and his third (as has been already seen) to the Ontological. If these latter arguments then are invalid, the inference from a superior intelligence to the Ens Realissimum fails. The Physico-Theological Argument in performing this part of its task falls back on the Cosmological, and that again upon the Ontological, which is therefore the only possible ground of proof; and as this proof has been shown to be fallacious the existence of the Ens Realissimum remains undemonstrated and undemonstrable.[1]

43. All Ontology therefore fails. Of no one of

[1] There is a very valuable section of the Methodology (*Critick*, 475–82), on the necessary conditions for the validity of a transcendental or *a priori* proof of the existence or properties of real objects. Kant lays down three rules: 1. Attempt no proof without inquiring from what source the principles employed in it are derived. 2. The proof must be direct, and not *ex absurdo;* the value of which rule is strikingly exemplified in the Antinomies. 3. There can be but one ground of proof; a rule the adoption of which would have simplified the discussion of the Ideal.

the three Ideas of the Pure Reason can we prove the objective validity. But it is the duty of the Philosopher not merely to destroy but to build up—not merely to point out the abuse of which the Ideas are susceptible, but to indicate the uses which they are intended to serve. "Whatever is grounded on the nature of our powers," says Kant, "will be found in harmony with the final purpose and proper employment of these powers, when we have once discovered their true direction and aim. We are therefore entitled to suppose that there exists a mode of employing the transcendental Ideas which is proper and immanent; although when we mistake their meaning, and regard them as conceptions of actual things, their mode of application is transcendent and delusive." (*Critick*, 394.) To this task, accordingly, the remainder of the Transcendental Dialectic is directed. There are, according to Kant, certain Regulative principles of Pure Reason, which it is absolutely necessary for us to adopt in order to bring our knowledge to the highest degree of unity and system, and the three Ideas enter as necessary elements into the three leading Regulative principles. One of these principles Kant designates the Principle of Homogeneity. Since we can only class together objects which have some features in common, if every thing we met with was wholly dissimilar to any other thing we knew, all generalisation and general knowledge would become impossible. Hence homogeneity in objects of knowledge must

be presupposed if we are to advance beyond individual intuitions at all. Without it the Understanding (in its widest sense) could only exist as a dormant faculty, and would never find anything suited to its nature in the sensible world. But in such a state we should have no Experience (in the Kantian meaning of the word ; of course we would have sensations), since Experience requires the conjunct action of the Sensibility and the Understanding. Some degree of homogeneity must therefore be presupposed as a condition of experience itself. In this indefinite form the Principle of Homogeneity is as certain and objectively valid as any of the Principles which were treated of in the Transcendental Analytic, and is in fact implied by them. But the Principle of Homogeneity which Kant here insists upon goes much beyond this. It asserts that no genus at which we have arrived is to be considered as the highest, but that we must always seek for higher and higher genera; in other words, that whatever amount of homogeneity we may have detected in Nature, we must presuppose that *more* homogeneity exists, and go on to seek for it. The connexion between this search for higher and higher genera and the search for higher and higher principles—higher and higher conditions—never resting until we reach (which we never can do) the absolutely certain and absolutely unconditioned, is sufficiently obvious. But as this principle does not tell us what degree of homogeneity we are to ex-

pect—how many genera lie intermediate between the highest that we have actually reached and the highest of all—it is not a constitutive but a regulative principle. And here Kant distinguishes this principle from those which he had termed "regulative" in the Transcendental Analytic. The latter are regulative of phænomena or intuitions; but as this regulation is essential to Experience, such principles are Constitutive in relation to Experience. But the principle of Homogeneity is only regulative with respect to Experience, inasmuch as we are unable to determine *a priori* how much Homogeneity is to be expected. But here arises one of the most difficult problems in the *Critick*. Is this Principle of Homogeneity or Law of Parcimony in any sense a Law of Nature, or is it a mere rule adopted by the Reason to save itself trouble in classifying and arranging its knowledge? Kant speaks in his *Prolegomena* of having merely started this problem in the *Critick*, and left it unsolved; but the language of the *Critick* itself does not seem to wear this problematical aspect. Paradoxical as it may appear to speak of Regulative Laws of Nature (though does not the paradox arise from the assumption that Nature is a thing *per se*?) which are not Constitutive, Kant appears to assert positively that Nature does and must possess such laws. "Parsimony in principles," says he, "is not merely an economical principle of Reason, but an essential law of Nature.

We cannot understand, in fact, how a logical principle of unity can of right exist unless we presuppose a transcendental principle by which such a systematic unity, as a property of objects themselves, is regarded as necessary *a priori*." (*Critick*, 399.) Accordingly Kant adopts the Scholastic form of the Axiom, *Entia præter necessitatem non esse multiplicanda*, which, as he observes, "asserts that Nature herself assists in the establishment of this unity of Reason." (*Critick*, 400.) But how are we warranted in making such an assertion about Nature *a priori?*—for our only reason for making the assertions involved in the principles of the Analytic was that without them Nature herself (*i. e.*, objects of experience) could not exist. Kant's answer is as follows:—"The law of Reason which requires us to seek for this unity is a necessary law, inasmuch as without it we should not possess the faculty of Reason, nor without Reason a consistent and self-accordant method of employing the Understanding, nor in the absence of this any proper and sufficient criterion of empirical truth. In relation to this criterion, therefore, we must suppose the Idea of the systematic unity of Nature to possess objective validity and necessity." (*Critick*, 399.[1]) The reader will probably regret that Kant has not developed this proof at greater length. He will recollect,

[1] See, too, *Critick*, 401.

however, that the criterion of empirical truth (as opposed to mere imagination or dreaming) was the thorough-going connexion of all the parts of experience with each other, and the possibility of connecting any one of them with any other by means of an unbroken chain of perceptions. This thorough-going connexion, it would seem, was in Kant's opinion possible only on condition of the objective validity of the Law of Homogeneity—at least as a principle regulative of Nature.

44. There are two other Regulative Principles of Reason similarly situated with regard to the external world. One is the principle of Specification, or that no species or sub-species is to be considered as the lowest possible, but that we must always seek for (and expect to find) differences between things which we have hitherto regarded as belonging to the same (lowest) species. Kant expresses this principle in the Latin form, *Entium varietates non temere sunt minuendæ.* It is, like the last, a Law of Nature as well as of Mind. "The faculty of Understanding," says Kant, "belongs to us just as much under the presupposition of differences in the objects of Nature as under the condition that these objects are homogeneous, because we could not possess concepts, nor make any use of our Understanding, were not the phænomena included under these concepts in some respects dissimilar as well as similar in character." (*Critick*, 403.) We

therefore suppose that Nature is richer in substances than our senses would indicate, and that objects between which we can now detect no differences would exhibit such differences if we had finer senses or more perfect instruments. The third principle is the principle of the Affinity of all Concepts, or that no species or sub-species are in the view of Reason the nearest possible to each other, but that it is always possible to interpolate additional kinds or classes between them. This princpile rests upon the same footing with the other two, and when applied to Nature it is known as the Principle of Continuity. This principle must be distinguished from the principle of the continuity of motion or change, which we met with in the Analytic as an inference from the Second Analogy of Experience combined with the Anticipations of Perception; and to mark the distinction Kant designates it the Law of the Continuity of Forms (or Species). The law of the continuous gradation of created beings maintained by Bonnet, and since supported on other grounds by Dr. Darwin, is a mere inference from this principle of Affinity or Continuity of Forms.

45. But what has all this to do with the Ideas of Pure Reason? This, according to Kant. One or other of the three Ideas is necessary to guide us in the application of the three great Regulative Principles to Nature. They are in this respect analogous to the Schemata which we met with in the

Analytic. It is only by means of the Ideas of the *maximum* of the division and connexion of our cognitions in one principle that the application of the three Regulative Principles can be directed. (*Critick*, 407–8.) But when we come to ask which of the Ideas of Pure Reason corresponds to each of the three Regulative Principles, I confess I have not been able to find a definite answer in Kant. That the Idea of the Deity corresponds to the Principle of Affinity may perhaps be inferred from the footnote to page 353 of the *Critick*, and if compelled to complete the list, I might perhaps set down the Idea of the World as the counterpart of the Principle of Specification, and that of the Soul as corresponding to the Principle of Homogeneity. But I am unable to support these views by any definite quotations from the *Critick*, and entertain no small doubts as to their accuracy. The genuine Kantian has no easy task before him in systematising the Transcendental Dialectic, and it is a task to which I would respectfully invite the attention of the adherents of the Critical Philosophy, who are pretty numerous both in this University and elsewhere.

46. But that the three Ideas of the Pure Reason tend to produce unity and system in our knowledge, and possess no slight value in that respect, is a point which Kant has argued at greater length; and this is enough to prove that they have a genuine

use as well as a paralogistic abuse. "If it can be shown," says our author, "that the three Transcendental Ideas, although not relating directly to any object, or determining it, do nevertheless, *on the supposition of an Ideal object*, produce systematic unity in the empirical employment of the Reason, and extend our empirical cognition without ever being inconsistent or in opposition to it—then it must be a necessary maxim of Reason to regulate its proceeding according to these Ideas." (*Critick*, 411.) And this proves to be the case. The Idea of the Soul, for example, enables us to consider the phænomena of Mind separately from those of Matter, and is thus essential to a distinct science of Psychology; but as our author says, "We ought not to deduce the internal phænomena of the mind from a simple thinking substance, but to deduce them *from each other* under the guidance of the regulative Idea of such a simple being." (*Critick*, 412.) It is so likewise with the Idea of the Deity. Without this Idea we cannot introduce the notion of Design into the Universe, which is nevertheless essential to the explanation of more than one branch of knowledge. Medical Physiology and anatomy, for example, proceed upon the assumption that every portion of the human body is designed for some particular end, and it is known that it was by such an argument from design that Harvey was led to his great discovery of the circulation of the

blood.[1] But though these Ideas are thus useful, we cannot infer the existence of real objects corresponding to them. We know too little of the possibilities of things to say that nothing but a Soul could account for the unity of the internal phænomena, or that nothing but a Deity could account for the adaptation of means to ends in nature. We can therefore only admit a Soul and a Deity in a relative sense. Instead of saying there *is* a Soul—that is, a simple immaterial thinking substance—we must (at least so far as we confine ourselves to speculative Reason) be content with saying that if there be not a Soul, there is something which stands in the same relation to the internal phænomena that a Soul would stand in if it existed. Instead of saying, there *is* a God, we must be satisfied with saying, if there be not a God there is something which stands in the same relation to the Universe which God would stand in if he existed. The internal phænomena present the same characteristics which they would present if there was a Soul; the universe presents the same

[1] The fundamental principle of a little work on Space and Vision, published by the present author some two years ago, namely, that the retina of the eye is the immediate object of visual perception, was suggested in a similar manner. When studying the structure of the eye, and the remarkable contrivance for depicting the images of external objects on the retina, the question occurred to me, To what purpose does Nature take all this trouble if the external objects themselves are perceived, while these pictures of them are not known to consciousness at all?

characteristics which it would present if there was a God. But then the hypotheses of a Soul and a God are only one of the ways of explaining these characteristics, and though we may not be able to conceive any others, it does not follow that the only conceivable explanation is the true one. Physicists have not yet been able to decide between the single-fluid and double-fluid theories of electricity,[1] or between the hypotheses that the vibrations of a beam of polarised light are parallel to the plane of polarisation, and perpendicular to it; and in general the mere fact that an hypothesis explains the phænomena is insufficient to establish its truth. But here whatever explains the phænomena must itself belong to the super-sensible world, and therefore its existence or non-existence cannot be ascertained by experience. To suppose that experience can ever either prove or disprove the existence of the Soul and the Deity is to suppose that it will cease to be limited to phænomena, and become cognisant of things *per se*. Experience, therefore, can never tell us whether the causes which Reason assumes in this instance are or are not *veræ causæ*. Their existence must consequently always remain hypothetical. But the presumption

[1] Should the electric fluid prove to be identical with the luminiferous ether, which I think there are strong grounds for surmising, the single-fluid theory will of course be established.

(such as it is) is in favour of the hypotheses which Reason naturally originates, and which alone (so far as we can conceive) are capable of explaining the facts. "The sole condition," says Kant, "so far as my knowledge extends, under which this (teleologic) unity can be my guide in the investigation of nature, is the assumption that a Supreme Intelligence has ordered all things according to the wisest ends. Consequently, the hypothesis of a wise author of the universe is necessary for my guidance in the investigation of nature; and since the result of my attempts so frequently confirms the utility of this assumption, and nothing decisive can be adduced against it, it follows that even in this theoretical connexion I firmly believe in God." (*Critick*, 500.) Still it is the Idea, not the existence of a corresponding object, which is essential to the investigation of nature, and it may, after all, resemble the imaginary focus of a mirror—a point from which the reflected light appears to emanate, but where there is nevertheless nothing but total darkness. (*Critick*, 395; see too 417.) In the case of the World, indeed, the latter explanation must be the true one; for the Ideas of the World being antinomial—self-contradictory—the existence of corresponding objects is impossible; but still both Thesis and Antithesis, considered merely as Regulative Principles, are useful and consistent. The one tells us ever to ascend higher and higher

in the series of natural causes: the other tells us that our researches in this way can never prove complete—that nature is not all-sufficient, and that we must not attempt to extend its laws over everything, to the annihilation of Moral Philosophy, which rests upon Freedom, as Natural Philosophy does on Necessity.

47. Such is the substance of the Critick of Pure Reason, a work of great genius, though in many respects imperfect, and requiring completion at the hands of the genuine disciples of the author. But such genuine disciples are rare indeed. It would be difficult to name a philosopher in this country who has really grasped the fundamental principle of the Kantian structure, *that sense can intuite a priori;* and accordingly while the *a priori* character of Space and Time has been enlarged upon by many, the fact that they are intuitions and not concepts, and belong to Sensibility not Understanding, has been almost lost sight of. Hegel has been often represented as the disciple of Kant, and the perfecter of his philosophy; but the fact is that Hegel rejects the very first distinction in the *Critick*—that between the Sensibility and the Understanding—and returns to the stand-point of Leibnitz, who regarded the latter as the fundamental faculty, and the distinction between the two as one of degree only. Mr. Hodgson advertises his system as an extension of the principles of the *Critick;* but as

Kant would have classed Hegel as a Leibnitzian, he would have equally classed Mr. Hodgson as a Lockian. The distinction of the faculties is again explained by the latter author as one of degree, and attempt is made to derive the forms of the Understanding from those of the Sensibility, and thus virtually to merge the latter faculty in the former. I mention these merely as specimens; and I do not mean to compare the merits of their respective philosophies with that of Kant. I only protest against calling the authors Kantians. It would be about as correct to describe the Fresnellian theory of Light as an extension or development of the Newtonian. I am far from thinking the Kantian system perfect; but I believe it is worth studying as a system, and in such a study I fear the reader will derive very little benefit from the writings of the professed disciples of the author.

48. Some of the defects which I believe to exist in the *Critick of Pure Reason* have been already indicated. Want of method (which is particularly conspicuous in the Dialectic) and inconstancy in nomenclature are among the most prominent. The latter fault indeed is carried farther in the *Critick of Pure Reason* than almost any work that I am acquainted with, and it has compelled me in this exposition to lay aside one of the terms which has been regarded as most characteristic of the system—the word *Transcendental*. The corresponding term *Em-*

pirical has at least two meanings in the *Critick*, viz., that which is derived from experience, and that which is applicable to experience; and the confusion is worse confounded in the *Prolegomena*. Kant calls Space and Time *concepts* in the very passages where he is insisting that they are not concepts but intuitions. He tells us that neither concepts nor intuitions alone constitute *cognitions*, and yet he not only repeatedly speaks of them as such, but actually, when professedly explaining the meaning of the various terms employed by him, divides cognitions into intuitions and concepts (*Critick*, 224). The variations in his use of the terms *understanding*,[1] *cosmological*, *cosmical*, and *regulative* are noticed by Kant himself; and I am not sure whether on comparing page 4 of the *Critick* with page 16, I should not add *transcendental* to the number; though passages occur in the volume in which the word cannot in my opinion be understood in either of these senses. His example of a *mixed* (as opposed to a *pure*) *a priori* cognition is repeatedly spoken of as *pure* in other parts of the work (see *Critick*, 2). It would be tedious and of little use to go through the similar inaccuracies and inconsistencies of our author in detail. I shall, however, give one more specimen.

[1] I confess, however, that I have been unable to detect the ambiguities in the words *Judgment* and *Reason* which other writers have professed to discover.

At p. 92, where Kant is distinguishing between the "mere Category" and the Category and its schema (though the schema is not introduced in terms for several pages afterwards) or empirical Category, we find the following sentence: "This synthesis of the manifold of sensuous intuition, which is possible and necessary *a priori*, may be called figurative (*synthesis speciosa*) in contradistinction to that which is cogitated in the mere Category with regard to the manifold of an intuition in general, and is called connexion, or conjunction, of the understanding (*synthesis intellectualis*)." It seems to me impossible to reconcile this with the other declarations of Kant in the Deduction of the Categories without supposing that what he intended to say was somewhat as follows:—This synthesis of the manifold of the *human* sensuous intuition which is possible and necessary *a priori* may be called figurative synthesis (*synthesis speciosa*) to distinguish it from that which is cogitated in the mere Category (form of judgment) with regard to the manifold of a *sensuous* intuition in general (whether the human or some other), and which may be called *synthesis intellectualis*. (See *Critick*, 89.) But faulty as the language of the second edition is, that of the first is far worse.

49. However, passing over these faults in language there appear to me to be one or two defects in the system itself to which the disciples of Kant should direct their attention if the doctrine of their

master is ever to be generally accepted. The first of these, and perhaps the greatest, is the position of the Noumenon in the Critical Philosophy. Have we, on Kantian principles, any real reason for believing in the existence of this Thing *per se* at all? The principle of Causality is clearly inapplicable to the proof of its existence, for this principle is only shown to hold good in the phænomenal world; and though, as Kant says, there is nothing in the nature of the relation between cause and effect to preclude a Noumenon from being related in this manner to a Phænomenon, the mere absence of contradiction or impossibility affords no positive evidence that it is so. I referred already to the argument that if there be an Appearance there must be something to appear. But this reasoning seems to me to turn upon an ambiguity in the word Appearance. It may mean the Appearance *of* a Thing, in which case of course the Thing must be presupposed; but it may also mean *That which appears to be a thing*, and taken in this meaning, the existence of the Appearance does not imply the existence of the Thing. And I have some doubt as to how far Kant intended to press this argument. It is most distinctly stated at pp. xxxiii–iv. of the Preface to the *Critick*, where he says (the italics are his own). "It must be carefully borne in mind that, while we surrender the power of *cognising*, we still reserve the power of *thinking*, objects as things in themselves. For otherwise

we should require to affirm the existence of an appearance without something that appears—which would be absurd." Here it would seem as if he was rather defending the *thought* than the *existence* of the thing *per se*—on the ground that the *thought* of the Noumenon was involved in the *thought* of the Phænomenon. That his famous Refutation of Idealism does not *directly* establish the existence of a Thing *per se* corresponding to external intuitions is manifest; for the permanent is, equally with the changeable, affected by the condition of time, and hence belongs to the genus Phænomenon. Whether Kant thought he had *indirectly* proved its existence is another matter. Time is only the manner in which we are affected by our own activity, and had we nothing but an internal sense—were our external perceptions merely a portion of our internal perceptions which imagination had clothed with an illusory externality—then our own activity would account for everything, and Kantianism would resolve itself into Fichtianism. But Kant probably believed that having shown that the external sense entered first into exercise, and that therefore our first perceptions were not only themselves passive, but were not even reflexions of our own activity (as our internal sensations are), he was warranted in assuming that there existed a Something which acted upon us, and by its action produced in us these passive impressions. This inference, however, from our passive impressions to an active Something which produced

them depends on the principle of Causality, and is therefore incapable of leading us to a Noumenon in the system of Kant. In fact the Philosopher of Konigsberg seems to me to have been incapable, like most other philosophers, of realising to himself the supposition of a thing beginning to exist without *any* cause—whether Divine volition, pre-established harmony, other minds, or the objectified abstractions, which have done so much in numerous systems from Plato down to Comte. A state of mind arising without being *produced* (whether by myself or by anything else whatsoever) was a conception which the Critical Philosophy ought, in my opinion, to have suggested to Kant; but it seems not to have occurred either to him or to his most eminent English disciple the late Dean Mansel. At the same time it should be observed that Kant often speaks of the existence of these Things *per se* with a great deal of doubt and uncertainty (see in particular the discussion on Phænomena and Noumena, near the end of the Analytic; also *Critick*, 205); and on one occasion, at least, he seems to intimate that they may turn out to be only hypostatised things of sense, which would be annihilated by the annihilation of our Sensitive Faculty, (*Critick*, 206.) The fact seems to be, that Kant could neither establish their reality nor dispense with them altogether. His disciples, however, if they mean to obtain general acceptance for his system must, I apprehend, adopt either alternative.

50. The other defect in the system which seems to me to require special attention on the part of the Kantians is as follows: The Categories, I admit, have not been successfully reduced to a smaller number, nor do I think they are likely to be so. But in my opinion those set out in the list of the great Critic are not co-ordinate. Hypothetical and Disjunctive Judgments do not admit of being divided into Universal, Particular, and Singular. That division is applicable to Categorical Judgments only. It is the same thing with respect to Quality. It is only Categorical Judgments that we can divide into Affirmative, Negative, and Infinite. Nor is Modality differently situated. The distinction between Problematical, Assertorial, and Apodictical Judgments is applicable to Categorical Judgments only. The name Categorical indicates that this fact was observed by the Schoolmen, but Kant seems to have overlooked it. Even if we were to try to force Hypotheticals and Disjunctives into the remaining forms a new difficulty would arise. Considered in respect of Quantity they would all be Universal (If A is B, C is D being the equivalent of Every Case-of-A-being-B, is a Case-of-C-being-D); in respect of Quality all would be Affirmative, and they would likewise all agree in point of Modality. Relation would therefore appear to be the fundamental form of Judgments, and Quantity, Quality, and Modality appear to be subdivisions of Categorical Judgments only. This change if introduced would

subvert a considerable part of the *Critick of Pure Reason;* but the Transcendental Dialectic goes far in my opinion to establish its necessity. Why, in that part of the work, does Kant obtain three fundamental Ideas instead of four (corresponding to Unconditioned Quantity, Unconditioned Quality, Unconditioned Relation, and Unconditioned Modality respectively)? Why does he, after succeeding in his attempt to carry the Idea of the Soul (founded on the Categorical Syllogism), through the four classes of Categories, apparently break down in his attempt to apply them to the Idea of the World, and abandon them altogether when he comes to treat of the Idea of the Deity? And why, I may add, do so many of his arrangements of other subjects under the Categories in his works appear forced and unnatural? However, my task has been to explain rather than to criticise, and my treatise is intended for students rather than philosophers. I shall therefore dismiss the latter with these breif hints of what I conceive to be the weak points in a system which otherwise stands unrivalled for daring originality and scientific completeness in the annals of Psychology; and I conclude by expressing my hope that the former will have learned enough from my somewhat imperfect outline to induce them to study the works of this great master of the Deductive Method for themselves.

THE END.